



This is to certify that the

thesis entitled

THE AMERICAN LEGAL SYSTEM AND ITS RELATIONS TO THE USDA FOREST SERVICE AND HUMAN-CAUSED WILDFIRES

presented by

Linda Ruth Donoghue

has been accepted towards fulfillment of the requirements for

Ph.D. degree in Forestry

mald Dickmann Major professor

Date ______May 16, 1983

MSU LIBRARIES RETURNING MATERIALS: Place in book drop to remove this checkout from your record. FINES will be charged if book is returned after the date stamped below.

DO NOT CIRCULATE
ROOM USE ONLY

THE AMERICAN LEGAL SYSTEM AND ITS RELATIONS TO THE USDA FOREST SERVICE AND HUMAN-CAUSED WILDFIRES

Ву

Linda Ruth Donoghue

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Forestry

1983

ABSTRACT

THE AMERICAN LEGAL SYSTEM AND ITS RELATIONS TO THE USDA FOREST SERVICE AND HUMAN-CAUSED WILDFIRES

Вy

Linda Ruth Donoghue

Over 90 percent of U.S. wildfires are caused by human activities. Information and education programs have helped reduce these wildfires, but professionals in land management agencies must also supplement education with programs such as law enforcement which, when properly understood and applied, could significantly reduce fire ignitions in the forest environment. Whether law enforcement is beneficial, however, depends in part on what wildland managers know about the legal system and how they use it to prevent human-caused wildfires.

This dissertation examines the American legal system, defining and describing its major components and interactions. It describes Forest Service relations and interactions with legal system components and processes and discusses how individuals enter, move through, and leave the legal system. It also examines the trends in and current status of Forest Service law enforcement and concludes with a quantitative assessment of the relations between law enforcement and human-caused wildfire occurrence.

The author collected and analyzed 12 years of law enforcement and wildfire occurrence data for 27 States in Forest Service Regions 8 and 9. Weather correction factors, based on monthly precipitation departures from normal, were used to adjust State fire occurrence data. Regression analysis was used to express the annual number of human-caused wildfires, corrected for weather and normalized by million acres protected, as a function of State legal efforts, expressed as the sum of annual wildfire prosecutions, convictions, and settlements.

Results indicate that increasing State legal efforts against wildfire violations decreases State wildfire occurrence; law enforcement efforts differ significantly in the North and South; legal efforts have a greater impact on incendiary and debris-burning fires than on other fire causes; compared to the South, Northern legal efforts have a greater impact on combined incendiary and debris-burning fires; and law enforcement in both regions affects incendiary fire occurrence more than debris-burning.

These results, although applicable to State fire management organizations, may reflect Forest Service legal efforts as well. Until the Forest Service collects suitable law enforcement data, the impact of its law enforcement efforts on wildfire occurrence remains unknown.

I dedicate this work to five people
who have graced my life with their
wisdom and understanding, their
knowledge, and most of all, their deep and abiding
friendship:

Victor J. Rudolph
the late R. Keith Hudson
Andrew Cainion
Donald A. Haines
and
Elinor M. Donoghue

ACKNOWLEDGMENTS

I extend special thanks to Scott L. Brooks, Attorney-at-Law, for sharing his legal expertise with me during the initial stages of my research and to Robert C. Ziegler, Regional Special Agent for Region 9, for devoting hours of his time patiently and thoroughly explaining and clarifying the Forest Service law enforcement system and its relations to the American legal system. I am also very grateful to Ernest V. Andersen and Wayne Wilson, Washington Office Law Enforcement, and to Freeman L. Brock, Jr., Washington Office Fiscal Support, for providing needed information and reviewing my work for technical accuracy.

My Project Leader, Albert J. Simard, deserves special mention for the guidance and energy he provided to my work, for his administrative support, and for his personal encouragement. Other research colleagues also warrant special mention for their interest, cooperation, and expert counsel. I extend sincere thanks to Donald A. Haines, Research Meteorologist, who always took the time to answer my numerous questions, and to William A. Main, Computer Programmer, for his patience, understanding, and invaluable technical contributions and assistance. Appreciation is



also extended to Donna M. Paananen, Technical Writer, for her superb editorial contributions, to Robin Bolig, CPT Specialist, for her excellent cooperation and assistance in producing the text, and to Fred McCauley, Forestry Aid, for his help in drafting the figures.

Finally, I am most grateful to Victor J. Rudolph for his guidance, encouragement, and patience throughout my academic program and to Donald I. Dickmann who accepted me as his own upon Dr. Rudolph's departure. In addition to Albert J. Simard, I offer thanks to Felipe Korzenny and John E. Gunter for their friendship and assistance and for serving on my graduate committee.

TABLE OF CONTENTS

LIST	OF	FIGURES	vii
LIST	OF	ABBREVIATIONS AND FLOWCHART SYMBOLS	ix
CHAP	rer		
I.	• :	INTRODUCTION	1
II.]	A GENERAL OVERVIEW OF THE AMERICAN LEGAL SYSTEM AND ITS APPLICATIONS TO THE USDA FOREST SERVICE	3
III.	.]	LAW	7
		Unlegislated Laws	9 10 13
IV.	.]	LAW ENFORCEMENT AND ENFORCEMENT AGENCIES	17
		Law Enforcement Agencies Forest Service Law Enforcement Law Enforcement Personnel Law Enforcement Agencies	22 25 28 30
V.	. (COURTS	34
		Structure and Jurisdiction of Federal and State Court Systems	37 42
VI.	. (CIVIL PROCESS	45
		The Forest Service and the Civil Process Settlement Before Cases Reach Court: Demand-for-Payment Process	49 52
		Demand-Iol-Layment Liocess	72

CHAPTER

VII.	CRIMINAL PROCESS	58
	The Forest Service and the Criminal Process	60
VIII.	TRENDS IN AND CURRENT STATUS OF FOREST SERVICE LAW ENFORCEMENT	66
IX.	THE ROLE OF FOREST SERVICE LAW ENFORCEMENT IN WILDFIRE VIOLATIONS	76
х.	A QUANTITATIVE ASSESSMENT OF THE RELATIONS BETWEEN LAW ENFORCEMENT AND HUMAN-CAUSED WILDFIRE OCCURRENCE	82
	Methods Data Collection and	82
	Computational Procedures	82 92 100 105
XI.	SUMMARY AND CONCLUSIONS	113
APPEN	DICES	
Α.	Statutes, Regulations, Orders, and Notices	120
В.	Federal Wildfire Protection Acts	124
С.	Imprisonment	125
D.	Court Jurisdiction	127
E.	The Civil Process	129
F.	The Criminal Process	144
G.	Similarities and Differences Between the Civil and Criminal Processes	166
BIBLI	OGRAPHY	172

LIST OF FIGURES

Figure		Page
2.1	The American legal system and its interactions with people and organizations	4
3.1	The law process	8
4.1	The relations among the law enforcement component (Enforcement Agencies) and subcomponents (Public Service, Prevention, Repression) of the American legal system and the system's human inputs and outputs	20
5.1	The United States Federal court structure. A more detailed explanation of these courts and their relations to one another can be found in The United States Government Manual	38
10.1	Six fire-climate regimes in the Eastern United States. States within each regime have comparable peak fire-activity seasons, seasonal vegetative stages, and precipitation patterns	87
10.2	Months of high, medium, and low wildfire occurrence for each of the six fire-climate regimes	89
10.3	Relations between monthly precipitation DFN and monthly wildfire occurrence DFN for periods of high, medium, and low fire incidence	90
10.4	Relations between legal effort and human-caused wildfire occurrence. (Note: If more than one point falls on the same plotting position, a count of the number of points is given. The + symbol indicates more than nine points on the same plotting position.)	95
10.5	Relations between legal effort and human-caused wildfire occurrence, transformed to a logarithmic scale. Confidence limits are plotted at the 0.001 significance level	97

Figure		Page
10.6	Plot and histogram of standardized residuals calculated from a linear model that was fit to the untransformed data in Figure 10.4	98
10.7	Plot and histogram of standardized residuals calculated from a linear model that was fit to the transformed data in Figure 10.5	99
10.8	Location of the 27 States relative to the regression line	102
10.9	Relations between State legal efforts and human-caused wildfire occurrence for all States, the Northern States, and the Southern States. Confidence limits are plotted at the 0.001 significance level	103
10.10	Relations between State legal efforts and incendiary/debris-burning wildfires for all States, the Northern States, and the Southern States. Confidence limits are plotted at the 0.001 significance level	106
10.11	Relations between State legal efforts and incendiary wildfires for all States, the Northern States, and the Southern States. Confidence limits are plotted at the 0.001 significance level	
10.12	Relations between State legal efforts and debris-burning wildfires for all States, the Northern States, and the Southern States. Confidence limits are plotted at the 0.001 significance level	
E.1	A summary of major steps in the civil process. The numbers in the left margin correspond to the numbered steps in the civil process outlined in Appendix E	142
F.1	A summary of major steps in the criminal process. The numbers in the left margin correspond to the numbered steps in the criminal process outlined in Appendix F. Procedures for handling juvenile offenses are not included	162

The second second

LIST OF ABBREVIATIONS AND FLOWCHART SYMBOLS

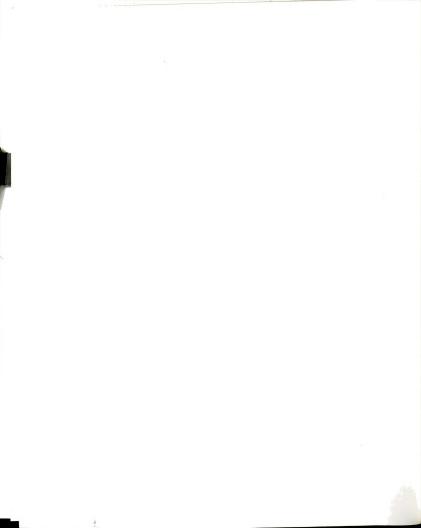
ABBREVIATIONS

APA --Administrative Procedure Act -- Code of Federal Regulations CFR FBI -- Federal Bureau of Investigation --Forest Service Manual FSM GAO --General Accounting Office --General Services Administration GSA LEMARS -- Law Enforcement Management Reporting System -- National Crime Information Center NCIC OGC --Office of the General Counsel OIG --Office of the Inspector General USC -- United States Code USDA -- United States Department of Agriculture



FLOWCHART SYMBOLS

Major components of the American legal system	
Subcomponents of the American legal system	
People or activities of people	
Flow of people through the American legal system	>
Interactions between components and subcomponents of the legal system; interactions between components and subcomponents of the legal system and people and/or activities of people	>
Two flow lines that do not connect	→
Branch point, indicating a flow in more than one direction	→



An infinite source or an infinite sink

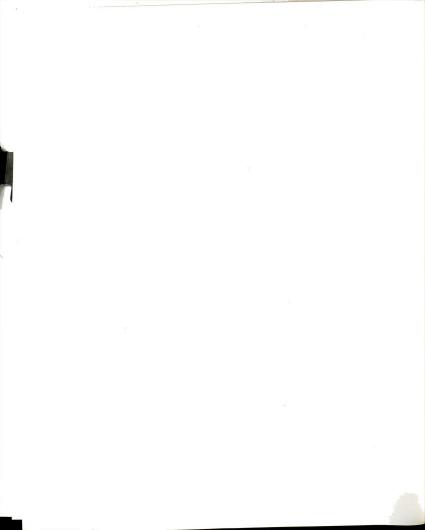


Connector, indicating flow to widely separated parts of a diagram



System outputs (0/S is an abbreviation for "out-of-system.")





CHAPTER I

INTRODUCTION

Ninety-one percent of all wildfires occurring in the United States are caused by human activities. From 1974 through 1978, an average of 128,092 fires burned 1,814,943 acres of forest and other protected lands (USDA Forest Service 1970-1981). In Region 9 alone (the 20 North Central and Northeastern United States) the estimated costs each year of presuppression, suppression, and damage resulting from fires totaled more than \$50 million. Such costs are a major concern to wildland agencies. Any reduction in the number of fire starts would reduce the wasteful destruction of our nation's forests, maintain our wildland resources, and lessen (or at least hold static) the costs to American taxpayers.

Information and education programs, such as Smokey Bear, have been helpful in reducing human-caused wildfires, but they cannot do the whole job. Professionals in land management agencies must also supplement public education with

¹The information, courtesy of Albert J. Simard, is from an unpublished 1979 report, "Fire Statistics in the North-east," on file at the U.S. Department of Agriculture, Forest Service; North Central Forest Experiment Station, East Lansing, MI.

other viable programs which, when properly understood and applied, could significantly reduce the number of fire ignitions in the forest environment.

Using the legal system to prevent and control human-caused wildfires is one way of supplementing education programs. When correctly utilized, the legal system may help persuade or control people unaffected by more indirect measures (such as education and information programs). For example, people violating fire laws can be fined or imprisoned for breaking the law. Consequently, if used in fire prevention efforts, the legal system could benefit land management agencies.

Whether or not such use of the legal system is beneficial, however, depends, in part, on what wildland managers know about the system and how they use it to prevent human-caused wildfires. In many instances, they do not fully utilize the system because they don't understand it, or they believe it's too complicated and time-consuming to access on a regular basis.

In an effort to alleviate these problems, I will 1) examine the American legal system in general, defining and describing major components and interactions of the system;

2) describe in greater detail the relations and interactions between the Forest Service and the legal system components and processes; 3) discuss how individuals enter, move through, and leave the legal system; and 4) evaluate how the Forest Service uses the legal system to repress wildfire offenses.

CHAPTER II

A GENERAL OVERVIEW OF THE AMERICAN LEGAL SYSTEM
AND ITS APPLICATIONS TO THE HSDA FOREST SERVICE

The American legal system is a set of four interrelated components--legislative groups, legislated laws, enforcement agencies, and courts--whose interactions formalize standards of behavior for members of our society.

Reflecting the needs and desires of society, legislative groups at Federal, State, and local levels formulate and enact laws, including constitutions. Many of these constitutions not only establish enforcement agencies within the executive branch and courts within the judicial branch of government, but also give them authority to act on behalf of the American people. Aided by legislated laws and the courts, enforcement agencies try to maintain or produce lawabiding behavior in individuals or organizations² (legal system inputs and outputs) with respect to those actions regulated by law. The interactions between the legal system and its human inputs and outputs follow several sequential steps (Fig. 2.1).

²To avoid redundancy, the phrase "and organizations" will henceforth not be repeated each time with the term "individuals." ("Organizations" refers to corporations, groups, unions, business firms, institutions, etc.)

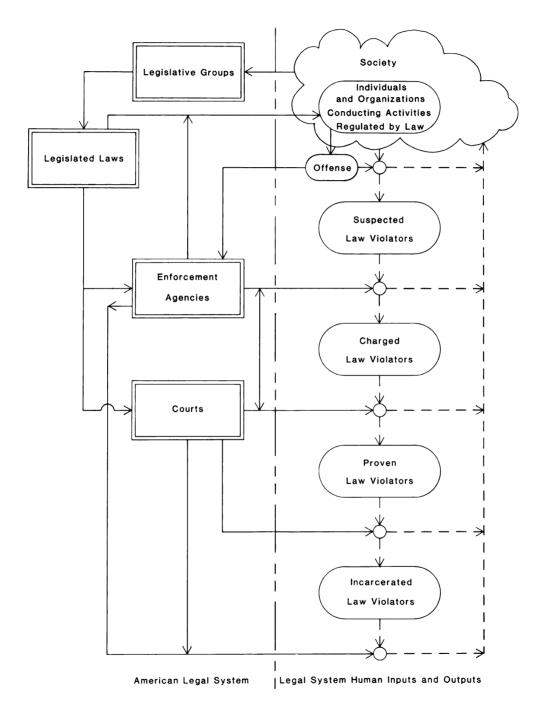
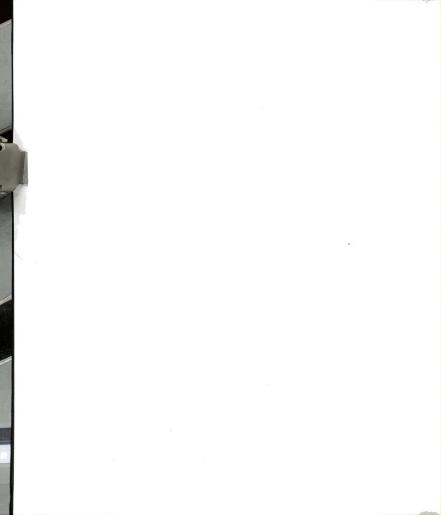


Figure 2.1. The American legal system and its interactions with people and organizations.



Being aware of laws and the consequences of breaking them (e.g., knowing that burning without a permit is illegal and can result in a fine) provides enough incentive for most people to remain law-abiding on a continuing basis.

Individuals can, however, become suspected law violators if they are perceived to have done something wrong, whether or not they actually have broken a law. If the available evidence indicates that they have not broken the law, these individuals are no longer processed by the legal system for alleged offenses.

If, however, evidence seems to indicate a wrongdoing, suspected law violators become charged law violators; that is, they are formally charged in criminal cases or sued for a wrongdoing in civil cases. (To simplify terminology, I use the phrase charged law violators to cover both civil and criminal cases even though, technically, the term does not apply to civil cases.) People are no longer processed by the legal system if, during the trial, they are vindicated of illegal action.

If the courts, by assessing the facts and interpreting the law, find the charged law violators guilty, they become proven law violators. While the courts determine restitution or punishment for law violators, enforcement agencies generally ensure that the penalties are carried out.

Proven law violators are considered law-abiding citizens when the courts and enforcement agencies agree that they've

paid their fines, served their sentences (<u>as incarcerated</u> <u>law violators</u>), or otherwise made restitution for wrongful acts.

In the pages that follow, I define and describe in greater detail the four components of the American legal system and their interactions with one another and with individuals and organizations. I also discuss the relations and interactions of the Forest Service with each component.

CHAPTER III

LAW

Laws, as defined in this dissertation, are standards of human conduct. They change, as society's needs and desires change, through custom and usage, judicial and religious interpretation, enactment, and other means (Fig. 3.1). Laws that are currently accepted and followed by members of our society can be divided into two groups: 1) unlegislated laws, both written and unwritten, based on tradition and secular and religious principles, and 2) legislated laws (statutes, ordinances, and regulations), based in part on the former, that are established by groups such as Federal and State legislatures, city councils, and administrative agencies. 3 Although legislated laws are of primary importance to the legal system and to fire management specialists, two types of unlegislated laws--common law and equity--are invoked during enforcement and judicial proceedings when legislated laws do not exist.

³Usually the term "legislated law" refers to statutory laws passed by Congress or State legislatures (in contrast to court-made law). I am using the term in its broadest sense, i.e., making or giving laws (which, by my definition, include not only statutes but also ordinances and regulations) by an authorized Federal, State, or local legislative group.



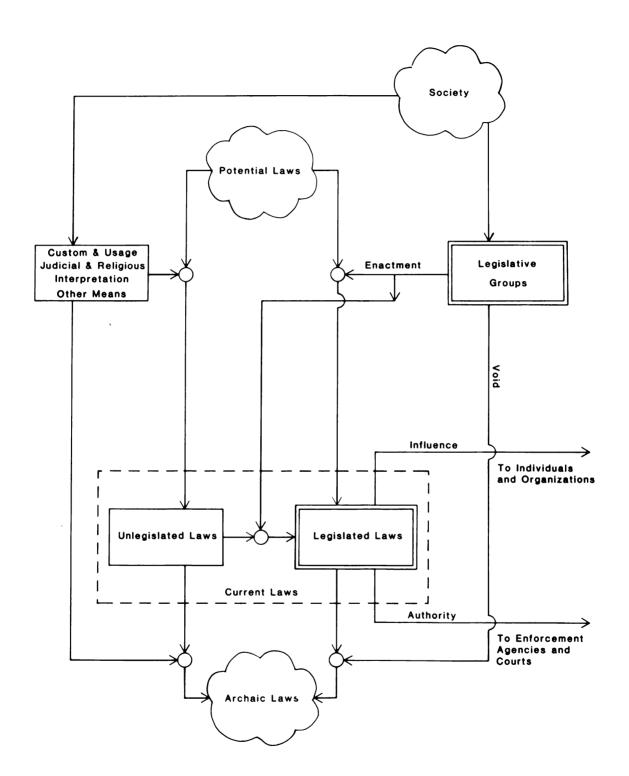


Figure 3.1. The law process.



Unlegislated Laws

Common Law: Common law is basically unwritten, judge-made law based on Anglo-Saxon customs and judicial precedent (Hemphill & Hemphill 1979). Its roots lie in the English legal system which had two types of courts existing side by side. The older of the two was known as the common law court. When ruling on cases, judges in these courts based their decisions primarily on previous court rulings which were considered high sources of authority and reflected customs of the day. Thus, the "doctrine of precedent," the essence of common law, was developed. Judges' decisions based on this doctrine (called stare decisis from the Latin, "let what is decided stand"), though authoritative, could be overturned on a showing of good cause.

Although most judicial decisions today are based on legislated law rather than common law, the importance of common law in our lives has not diminished, because most legislated laws can be traced to common law principles and rules.

Equity: In many cases common law courts in England either would not or could not act on behalf of individuals, or they made decisions that were too strict, narrow, and technical. Individuals could not file lawsuits, for example, unless the law addressed their particular circumstances. This frequently left complainants without any legal recourse in the

courts. In addition, common law courts had no provisions, such as injunctions, for stopping or preventing a wrong against an individual. To correct these injustices, the English chancery or equity courts began to hear such cases. The net result of their activities was the creation of a set of rules and "principles to be applied when common law did not provide a suitable remedy for a particular wrong" (Kempin 1973). These rules and principles (called equity), existing alongside common law, thus provided an avenue for society to enlarge and adapt old rules to new views. Equity continues to be an integral and important part of American law.

Legislated Laws

Common law and equity are not the only sources of law in America, however. After the Constitution was ratified in 1788, it became and continues to be the supreme law of the land. As the absolute rule of action and decision, the Constitution established the character and concept of our Government, including vesting legislative powers in a Congress. The Constitution thereby created a Federal legislative body with the power and authority to enact laws. Many State and local constitutions have since created similar legislative bodies. Although Federal, State, and local legislative groups have many nonlegislative powers, one of

their most important functions is to make formal, written laws that prescribe conduct, define crimes, appropriate money, and, in general, promote the public good and welfare.

Written laws can be divided into three primary groups—statutes, ordinances, and regulations. Statutes are generally enacted by a legislative body such as the U.S. Congress or a State legislature; ordinances by lesser governmental groups such as city and village governments and county and township boards; and regulations by Federal, State, or local administrative agencies such as the U.S. Department of Agriculture.

Because increased governmental regulation has resulted in immense growth of statutory law in this country, Federal, State, and local governments have organized their laws into a number of codes for easier reference. Each code

is a systematic compilation of both statutory law and the law handed down by the judges in their decisions. Typical examples of the state codes in use today are the probate, civil, penal, labor, political, administrative, educational, military and veteran's, health and safety, civil procedure, business and professions, and government code. Local governments also frequently adopt codes relating to firesafety, such as the electrical, building, plumbing, heating and ventilating, refrigeration, and fire codes (Bahme 1976).

The United States Code (USC) is particularly important; it arranges, under 50 titles, the statutes passed by Congress. (See Appendix AI for an explanation of the USC, the United States Statutes at Large, and the United States Code Annotated.)

The Code of Federal Regulations (CFR) codifies (also under 50 titles) detailed regulations enacted by administrative agencies. (The authority to enact regulations is expressed in the legislation codified in the U.S. Code. See Appendix AII and AIII for the definition and discussion of Forest Service regulations, orders, and notices and for procedures for formulating regulations.)

While laws can be categorized by type such as statutes and regulations, they can also be categorized by subject matter such as corporate, tax, contract, property, civil, or criminal law. I am concerned with two major categories here—civil and criminal law—which are, to some extent, composites of legislated and unlegislated law.

Civil law, stemming from common law and equity, is the portion of law that defines and determines the personal and property rights of an individual. These include the right to personal safety, the right to privacy, the right to enjoy a good reputation (which is a protection against defamation of character), the right to personal liberty (which is a protection against unlawful arrest and false imprisonment), and the right to be secure in ownership of one's own property without unlawful interference from others (protection against trespassers, for instance).

While civil law defines and determines the personal and property rights of an individual, criminal law defines and determines acts that are contrary to the public good. A

public wrong, or crime, is an injury to the order and peace of our entire society (whereas a civil wrong is an injury or violation of a personal or property right). This injury could come from "an act committed or omitted in violation of a law forbidding or commanding it" (Black 1979). Criminal law, which delineates offenses and their punishments, consists mainly of legislated law. Civil and criminal law and processes will be discussed in greater detail later in this dissertation.

Law in America--whether legislated or unlegislated; codified or uncodified; civil or criminal--is by no means static: Many of our laws are "subject to change through new decisions (some 30,000 a year) and new statutes (at least 10,000 a year). . ." (Cohen 1971). As a vital component of the American legal system, law enables people in our society, as individuals or as members of families, organizations, cities, or a nation, to function in a uniform manner resulting in the same general goals for all.

The Forest Service and Law

Although common law and equity are used in Forest Service legal activities, legislated laws are most important in both civil and criminal cases. For decades Congress has enacted statutes—referred to as acts—pertaining to the Forest Service, its purposes, and its programs. For example, these statutes, covering a broad range of Forest

Service activities, established the original Division of Forestry in the Department of Agriculture, created and stated the purpose of the National Forests, and in 1897 gave the Secretary of Agriculture the authority to make rules and regulations for the occupancy, use, and protection of the National Forests. Most of the principal laws affecting the Forest Service and its activities are found in the United States Code under Titles 7 (Agriculture), 16 (Conservation), 29 (Labor), and 43 (Public Lands).

Congress passed two very important wildfire acts, found under Title 18 (Crimes), that delineate criminal wildfire offenses and specify their punishments. The first act, 18 USC Section 1855 <u>Timber Set Afire</u> states that anyone convicted of willfully starting fires on Governmental land could be fined not more than \$5,000 or imprisoned not more than 5 years or could be sentenced to both a fine and imprisonment. The second act, 18 USC Section 1856 <u>Fires Left Unattended and Unextinguished</u> states that anyone convicted of setting a fire on or near National Forest land and leaving the fire without extinguishing it or allowing it to burn beyond control could be fined not more than \$500 or imprisoned not more than 6 months or could be sentenced to both a fine and imprisonment. (See Appendix B for the exact wording of these two laws.)

⁴Consult the Forest Service Manual (FSM) 1021 (and following sections) for specific laws or the current Agriculture Handbook No. 453, The Principal Laws Relating to Forest Service Activities.



In addition to these Federal fire statutes, the Secretary of Agriculture has issued fire regulations (Subpart A--General Prohibitions--36 CFR 261.5) prohibiting the following activities in National Forests:

- (a) Carelessly or negligently throwing or placing any ignited substance or other substance that may cause a fire.
- (b) Firing any tracer bullet or incendiary ammunition.
- (c) Causing timber, trees, slash, brush or grass to burn except as authorized by permit.
- (d) Leaving a fire without completely extinguishing it.
- (e) Allowing a fire to escape from control.
- (f) Building, attending, maintaining, or using a campfire without removing all flammable material from around the campfire adequate to prevent its escape.

The maximum penalty for violating these regulations is \$500 and/or 6 months imprisonment.

The preceding statutes and regulations apply to activities contrary to the public good (criminal wrongs). When an individual commits a criminal wrong (e.g., allows a debris fire to escape control), he or she may, at the same time, violate the property rights of the Forest Service (e.g., damage timber resources), thereby committing a civil wrong. Title 31 USC 951-953 (Federal Claims Collection Act of 1966) authorizes Federal agencies, such as the Forest Service, to sue for damages in civil court (Forest Service Manual [FSM] 6572.01).

No matter how many laws have been formulated to prescribe acceptable standards of human conduct, if they are not enforced regularly, they become meaningless. The next section, therefore, discusses law enforcement and enforcement agencies.



CHAPTER IV

LAW ENFORCEMENT AND ENFORCEMENT AGENCIES

While laws in our society prescribe conduct, define crimes, and in general promote the public good and welfare, they alone may not be enough to ensure law-abiding behavior in people. Enforcement is often necessary to make laws meaningful and effective. The term "enforce," according to Webster's New Collegiate Dictionary (1975), means to "strengthen; urge with energy; constrain or compel; carry out effectively." A number of Federal, State, and local laws give authority to and prescribe duties for law enforcement personnel; that is, they give law enforcers the right to influence or command desirable behavior. Thus, people with law enforcement responsibilities carry out the mandate or command of law, using a variety of measures, to encourage or, in some cases, force people to live by standards of conduct considered necessary to protect individuals and communities in our society.

Acting under the authority of law, enforcement people have as their primary goals to preserve peace, promote individual freedom, and protect life, property, and the constitutional rights of citizens. A number of methods are used

to achieve these goals. They include public service, prevention, and repression.

- <u>Public service</u> entails providing information, directions, and advice; serving summonses; and caring for the lost, sick, confused, distressed, or destitute, including delivering such people to a safe or helpful person or agency (counsel and referral).
- <u>Prevention</u> involves juvenile and adult public education (instructing people about their duties, obligations, rights, and privileges under the law and helping them to identify factors detracting from their liberty and safety); education or rehabilitation of people in correctional facilities; preventive patrol and other visible evidence of police capability and availability; and probation and parole duties. Regulation is also an important component of prevention. Examples of regulation include licensing, inspecting, and/or controlling: traffic (vehicles, parking, pedestrians), public events (crowds), social relations (domestic disputes), and animal behavior.
- Repression encompasses intelligence and surveillance work, detection and reporting of law violations, investigation, identification and apprehension of suspected law violators, arrest, presentation of evidence to prosecutors, participation in court proceedings, and detention.

The general relations between these law enforcement methods and activities and legal system human inputs and outputs are shown in Figure 4.1. While public service activities are directed toward society-at-large, prevention measures are targeted at society, suspected law violators (e.g., those given verbal or written warnings), incarcerated law violators, and those receiving out-of-jail or prison supervision. Repression activities are reserved primarily for people who enter the legal system for an alleged offense and are processed through the system as suspected, charged, proven, or incarcerated law violators. (A more detailed account of the relations between law enforcement personnel and people moving in and out of the legal system is given in the civil process and criminal process sections.)

As a group, law enforcement personnel employed by both public and private agencies perform an enormous variety of tasks that directly or indirectly aid law enforcement efforts in this country. Police, of course, are the most widely recognized law enforcement personnel; almost everyone has interacted with them at least once in his or her lifetime. Most of us commonly see State and local officers on preventive patrol, responding to emergencies, or ticketing people for traffic violations. But, in addition to patrol

⁵Figure 4.1 does not list all law enforcement activities, but rather illustrates major activities that can occur as people move through the legal system. The nature of an offense (whether civil or criminal) and the stage of the law violator in the civil or criminal process determine the types of repressive activities brought into play. Interactions between law enforcement personnel, grand juries, and juveniles are not shown.

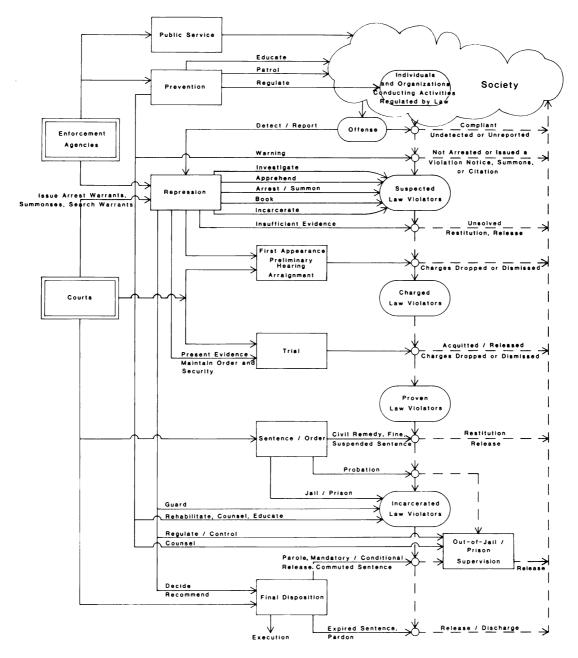


Figure 4.1. The relations among the law enforcement component (Enforcement Agencies) and subcomponents (Public Service, Prevention, Repression) of the American legal system and the system's human inputs and outputs.



officers, other categories of police include park police; airport police; highway, bridge, and tunnel police; harbor and maritime police; transit and utility systems police; college and university police; and border patrols. Besides police, however, law enforcement personnel can also include:

- · Parking enforcers
- · Prosecutors and district attorneys
- · Forensic medicine and crime laboratory employees
- · Private security forces
- Probation, parole, and correctional institution employees
- · Fire marshals
- · Fish and game wardens
- · Inspectors (e.g., postal, food and drug)
- Management and administrative employees in law enforcement agencies.

Regardless of the job or duties performed, law enforcement personnel can be divided into civilian or sworn employees. I define civilian employees as individuals who have not taken an oath of office and who are not authorized to make arrests (e.g., district attorneys, forensic scientists, legal advisors). 6 In contrast to civilian

⁶According to Germann et al. (1977), an arrest is "the taking of a person into custody for the purpose of charging him with a crime. . . . Technically, in most jurisdictions, anyone, citizen or officer, can make an arrest for a misdemeanor or felony. . . . " Usually, however, arrests are made by law enforcement officers who are "presumed to have the training and judgment necessary to make a good arrest."

employees, sworn employees (most often a public police officer) are persons who have taken an oath of office (received formal authority) and possess the general power of arrest.

Enforcement personnel can also be divided into generalists or specialists. A generalist is an individual with a wide range of public service, prevention, and repression duties and responsibilities (e.g., village, city, or township patrol officers, county sheriffs, and some State troopers); a specialist is a person concentrating his or her activities in limited areas such as narcotics, vice, organized crime, traffic safety, jail, criminal investigations, or civil wrongs.

Law Enforcement Agencies

There is no central law enforcement agency in the United States. Instead, law enforcement is the responsibility of a

⁷Gottfredson et al., eds. (1978), define the general power of arrest as

the power to suppress with force all breaches of the peace, riots, tumult and unlawful assemblies, power to serve all criminal process, including the power to arrest a person without a warrant if the person is apprehended in the process of committing an unlawful act or if he or she obtains "speedy information" by other persons.

Thus, a sworn law enforcement employee has much broader powers of arrest than a private citizen.



number of agencies on all three levels of government-Federal, State, and local. On the Federal level, for
example,

Thousands of people work in some twenty major, and scores of minor, law enforcement or investigatory units of federal government. These units are located in the Executive Office of the President, in the major federal departments, in the independent agencies, and in various minor boards, committees, and commissions. . . . Some deal primarily with security matters, others with criminal matters, others with regulatory matters of a quasicriminal-civil nature, and others with military matters (Germann et al. 1977).

Although these units exercise wide territorial authority, their duties range from very strong enforcement to relatively minor inspections and investigations.

Although both State and local agencies also vary enormously in character and law enforcement responsibility, agencies at all three levels of government can be grouped into the following general categories:

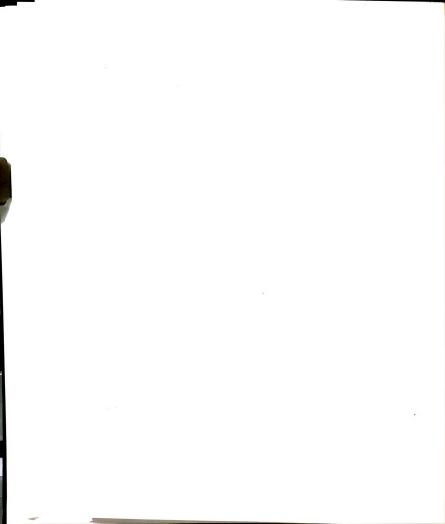
Government Attorneys. Examples: Attorney General of the U.S., State Attorney Generals, county prosecuting attorneys,

⁸A detailed account of Federal agencies that have law enforcement duties can be found in The United States Government Manual, published by the General Services Administration (GSA). For the most recent copy of the Manual, write to: Office of the Federal Register, National Archives and Records Service, Washington, D.C. 20408. Because the structure, jurisdiction, and responsibilities of State and local law enforcement agencies differ from State to State and department to department, I suggest that readers wishing to familiarize themselves with their own State and local structures contact their Governor's office, State police, county board of commissioners, or local police for more information.

city attorneys. As public representatives and chief law enforcement officers of their respective governments, public attorneys represent their governments in criminal and civil legal matters. They also advise their chief executives (e.g., the President, governor, mayor) and heads of governmental departments, respond to consumer complaints and needs, intervene in court cases to protect the rights of citizens, and/or charge and prosecute law violators in courts of law.

Police. Examples: U.S. Marshals Service, State police, county sheriffs and constables, city police. Their duties can cover the whole spectrum of law enforcement as I have defined it—from public service to repression. Michigan sheriffs, for example, supply patrol services in a county, investigate crimes, oversee jail facilities, provide rehabilitation and vocational training for inmates, and maintain a lake and river boat patrol in some of their jurisdictions. Sheriffs in other States can be responsible for everything from assessing property and collecting taxes to determining the causes of unusual deaths in a county and carrying out a death penalty imposed by a court.

Corrections. Examples: U.S. Bureau of Prisons and Parole Commission, State Departments of Corrections, county detention centers. Correctional agencies are responsible for the custody and care of incarcerated law violators and for their



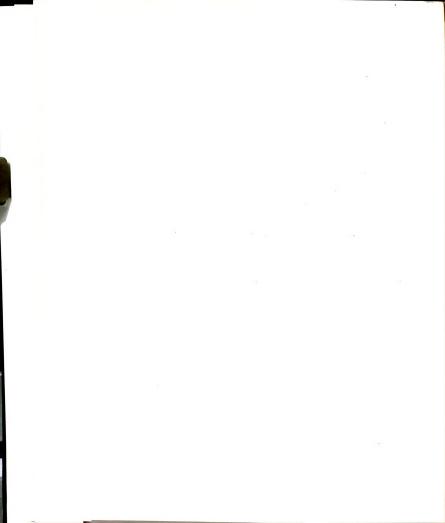
supervision after they leave jail or prison. These agencies not only run the nation's prisons, jails, halfway houses, reformatories, and related institutions, but also, on a Federal and State level, grant, deny, or revoke parole for imprisoned offenders. (For a discussion of imprisonment, see Appendix C.)

In addition to these agencies, investigatory and enforcement units of other Federal, State, and local departments (e.g., agriculture and natural resources, military, public health and safety, finance, commerce, employment, insurance, investment, civil service, industrial relations, marketing) also conduct a wide variety of civil and criminal enforcement functions.

Forest Service Law Enforcement

Realizing that Congressional statutes and Forest Service regulations may not be enough to ensure law-abiding behavior in people using National Forest lands, Congress gave the Forest Service authority to make these statutes and regulations both meaningful and effective—through law enforcement. The acts giving the Forest Service law enforcement authority and prescribing its enforcement duties include the following:

⁹For a more complete discussion of these acts, see FSM 5301. For exact wording, consult the current Agriculture Handbook No. 453, The Principal Laws Relating to Forest Service Activities.



- Title 16 USC 551, 480, Organic Administration Act, authorizes the Secretary of Agriculture to regulate the occupancy and use of National Forests and to preserve these forests from destruction; specifies the penalty for violating the Secretary's rules and regulations (a fine of \$500 or imprisonment for 6 months, or both); and, except in cases of Federal law violations, allows States to retain civil and criminal jurisdiction over persons on National Forest lands.
- Title 16 USC 559, <u>Authority to Arrest</u>, authorizes

 Forest Service employees (Forest Officers) to arrest violators of Federal statutes and regulations pertaining to the National Forests and to take them before the nearest U.S.

 Magistrate (having jurisdiction) for trial.
- Title 16 USC 553, Aid to States and Federal Agencies, permits authorized, and sometimes deputized, Forest Officers to help enforce State livestock, fire, fish, and game laws when this aid furthers the interests of the Forest Service. Under this act, the Forest Service is also authorized to aid, when requested, other Federal bureaus and departments performing law enforcement duties on National Forests.
- Title 16 USC 551a, Cooperation by the Secretary of

 Agriculture with States and Political Subdivisions in Law

 Enforcement, authorizes the Secretary of Agriculture to help



State or local governments enforce State and local laws on lands within the National Forest System.

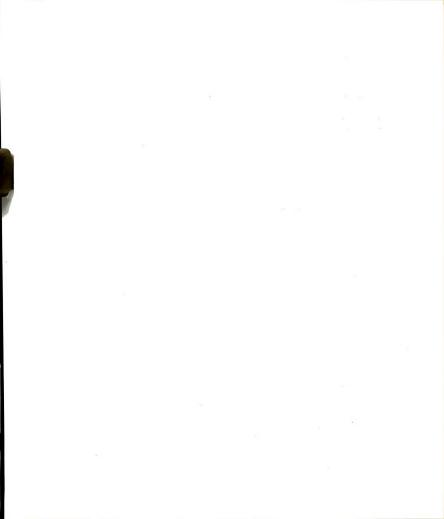
- Title 7 USC 2217-2218, Authority for Taking Oaths and Affidavits, authorizes designated Forest Officers to administer oaths and affidavits in order to enforce statutes and regulations pertaining to lands under Forest Service control.

Acting under the authority of these laws, Forest Service enforcement personnel have as their primary objective to develop and maintain a law enforcement program that will help ensure 1) compliance with statutes and regulations,

- 2) protection of the public and their property,
- 3) protection of Forest Service employees, 4) protection of forest resources and property, and 5) protection of the public's rights and interests in the National Forest System.

Prevention and repression, summarized in Figure 4.1, are the primary methods used to achieve these goals. Prevention methods include: informing National Forest users of applicable statutes and regulations, patrolling forest areas to deter law violations, and tactfully advising people of potential law violations. Prevention regulation activities include issuing burning permits to residents for debris disposal and closing forests to public use during high firedanger.

Repression activities in the Forest Service are limited primarily to suspected and charged law violators (Fig. 4.1). These activities include writing violation notices;

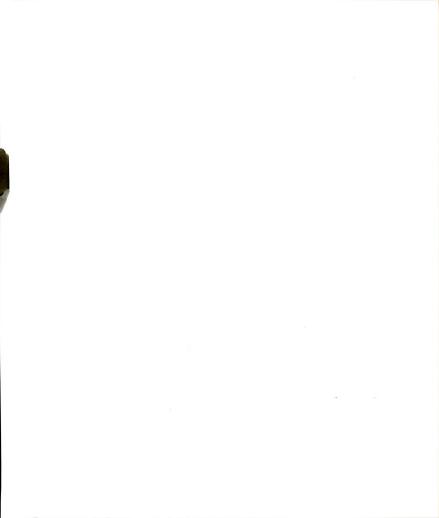


investigating reported or observed law violations; detecting the elements of crimes; collecting evidence (and recovering stolen property) to present to prosecutors; apprehending suspected law violators; arresting them for an appearance before a U.S. Magistrate or U.S. District Court judge; and presenting evidence against suspected and charged law violators in court.

Law Enforcement Personnel

Although all Forest Service employees are obliged to observe and report offenses and are authorized to arrest, the primary law enforcement personnel in the agency are Special Agents, Law Enforcement Officers, and Forest Officers trained to do relatively routine enforcement work. With few exceptions, Special Agents are the only full-time law enforcement employees in the Forest Service. As graduates of Federal law enforcement academies, they are highly trained specialists in criminal investigation. In addition to their important investigative duties, they direct both the cooperative and the in-service law enforcement programs, 10 and conduct law enforcement training courses for

¹⁰In directing the Cooperative Law Enforcement Program designed to protect forest-using people and their property, Special Agents serve as liaisons between the Forest Service and other law enforcement agencies. As directors of the inservice programs, designed to protect forest resources, Governmental property, and Forest Service employees, Special Agents provide technical advice and information to line and staff members involved in law enforcement situations or problems.



Forest Officers. They also advise Law Enforcement Officers and aid the latter in special situations requiring an agent's expertise and experience, e.g., situations involving confrontations between Forest Service employees and large groups of potentially violent people. Special Agents, like city detectives, wear plain clothes and travel in unmarked cars, carry firearms and credentials, and have the power to arrest and to perform search—and—seizure activities. They are assigned either to a National Forest with a heavy and complex investigative workload or to a large geographic area with more than one forest if the workload on one forest is not sufficient to require a full—time Special Agent.

Regional Special Agents (one per Region) spend most of their time in the office, directing Regional Law Enforcement Programs, coordinating law enforcement activities, supplying technical advice, and performing other administrative tasks. Occasionally, they travel to various National Forests to assist with special criminal investigative or other law enforcement problems.

In contrast to Special Agents, Forest Service Law
Enforcement Officers are much like "patrol" officers. They
wear uniforms, patrol in marked vehicles, and carry credentials, but are not authorized to carry firearms unless
they're exposed to significant and continuing elements of
risk. Most Law Enforcement Officers are assigned to forests
or districts with unusually heavy and complex enforcement
workloads and spend 10 to 50 percent of their time in law



enforcement activities. In order to function in a professional manner, these employees receive at least 9 weeks of full-range law enforcement training (designated Level IV training) at the Federal Law Enforcement Training Center, Glynco, Georgia, or at State law enforcement academies.

Although all Forest Service employees are considered Forest Officers, I use the term here to refer to employees receiving a minimum of 1 to 3 weeks of law enforcement training (designated Level II and Level III training). Their routine enforcement duties (averaging 5 to 20 percent of their time) include patrolling, preliminary investigative work, and issuing violation notices for petty offenses such as littering, improper campfire construction, or nonpayment of fees. They may also advise Forest Supervisors and District Rangers on enforcement and investigative problems and assist Special Agents in investigations. Although Level II and III Forest Officers are not allowed to carry firearms (Level III's can carry mace), they do have authority to arrest; this activity, however, is normally relegated to Special Agents and Law Enforcement Officers.

Law Enforcement Agencies

Forest Service law enforcement personnel interact with the following law enforcement departments, bureaus, agencies, and personnel on Federal, State, and local levels:

Office of the General Counsel (OGC). Attorneys from the OGC, the principal legal advisor in the USDA, are



stationed in various field locations as well as in their Washington, D.C., headquarters. Among other duties, they provide legal advice to the Forest Service, draft or review proposed legislation, prepare and interpret a wide variety of legal documents such as contracts, resolve legal disputes outside of court, and prepare Forest Service cases for U.S. Attorneys.

Office of the Inspector General (OIG). The OIG has authority to conduct investigations into all programs and administrative activities of the USDA. Areas of investigative jurisdiction between the Forest Service and the OIG are clarified in a statement of determination between the two agencies. (See FSM 5350.43b.)

Federal Bureau of Investigation (FBI). Law enforcement personnel from each National Forest and the nearest FBI special agent-in-charge establish informal agreements to outline which Federal law violations will be reported to the FBI. (The FBI has jurisdiction to investigate violations of Federal statutes but not violations of Forest Service regulations.) For instance, the FBI may investigate law violations for the Forest Service if the amount involved is more than \$5000, or, in the case of assault, if someone is injured. Because of their special expertise in natural resources, however, Forest Service law enforcement personnel generally conduct their own investigations.



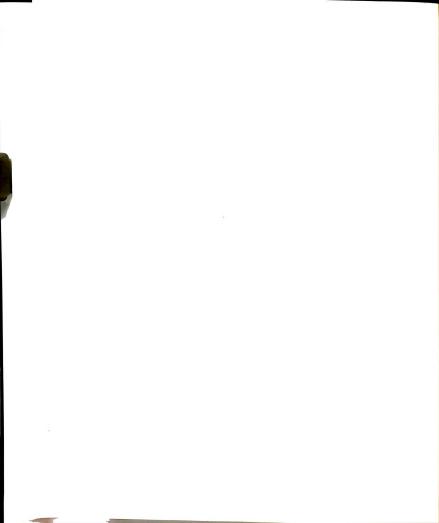
The National Crime Information Center (NCIC) in the FBI headquarters, Washington, D.C., is used by the Forest Service to investigate a suspect's criminal history or to report stolen Governmental property bearing serial numbers.

- U.S. Attorneys. Each U.S. Attorney under the Attorney General in the Department of Justice supports Forest Service law enforcement efforts within his or her own judicial district (the U.S. is divided into 95 judicial districts). This support includes: 1) prosecuting Federal felony and misdemeanor violations in U.S. District Courts and U.S. Magistrates' Courts,
- 2) preparing and/or acquiring Federal complaints, written accusations, warrants, and injunctions, and
- 3) initiating lawsuits to recover damages resulting from violations of Forest Service statutes and regulations.
- <u>U.S. Marshals Service</u>. The U.S. Marshals Service, also within the Department of Justice, performs a wide range of law enforcement tasks in the 95 U.S. districts. Although the marshals' duties include attending court and preserving order in the courtroom, protecting Governmental witnesses, and quelling civil disturbances, the Forest Service uses the marshals primarily to serve arrest warrants or summonses and to transport suspected law violators to the proper authorities.



State and Local Agencies. Because of overlapping State and Federal jurisdiction, Forest Service law enforcement personnel cooperate with State and local law enforcement units such as State forestry and wildlife agencies, State police, county sheriffs, and/or county, city, or township police. Forest Service employees may, for example, provide local law enforcement officials with observed evidence. When an offense occurs on National Forest land that is a violation of both Federal and State laws, a State or local law enforcement agency may investigate the incident and apprehend the suspect. In such cases, most U.S. Attorneys prefer that the suspected law violator be prosecuted by the State.

Even though law enforcement agencies conduct a wide range of public service, prevention, and repression activities, often with the aid of cooperating agencies, they must rely on Federal and State courts to administer justice. The next section describes Federal and State court systems and discusses their structure and jurisdiction.



CHAPTER V

COURTS

In addition to legislative groups, legislated laws, and enforcement agencies, courts, the fourth component of the legal system, are also used by our society to maintain order. The term "court" is used here to mean an organized body of individuals (one or more judges and often a jury) "with defined powers, meeting at certain times and places," primarily to hear and decide cases and other matters brought before it (Black 1979). The court is aided by officers such as attorneys or legal counselors who present and manage business, clerks who record and attest to the court's acts and decisions, and bailiffs who execute the court's demands and secure order in the courtroom (Black 1979). (The words "court" and "judge(s)" are frequently used synonymously.)

Courts and law are interdependent: On one hand, laws establish the courts and limit their power, while on the other, courts can, in some sense, make law. The Constitution (Article III, Section I), for example,

generates the authority for the establishment of courts in the federal system. The Supreme Court is the only federal court mandated by the Constitution. All other federal courts are established by acts of Congress. . . . State court systems are also created under the auspices of their respective state constitutions (Chamelin et al. 1975).



In addition, laws establish court jurisdiction (authority of a court to handle a case--see Appendix D), limit the sentences judges can impose, and, in the case of a constitutional amendment, override court decisions.

Guided by common law principles, court decisions can, however, have the effect of law.

Notwithstanding the separation of powers concept and the belief that courts do not make laws, it is somewhat unrealistic and academic to believe that lawmaking does not occur whenever the court renders a decision. Every constitutional interpretation, every declaration of statutory constitutionality or unconstitutionality makes law in the broadest sense of the word. It is true that courts do not enact laws in the same manner as legislatures and the Congress, but the impact of court decisions does set standards of social and legal policy (Chamelin et al. 1975).

Like the courts and the law, courts and law enforcement agencies are also inextricably bound together. For example, law enforcement personnel, in many cases, control the flow of people going before the courts. They also serve summonses issued by the courts; present evidence to judges during initial appearances, preliminary hearings, and trials; serve as witnesses in court proceedings; maintain order and security in courtrooms; ensure that restitution is made or that sentences are carried out after trials; and, in conjunction with the courts, decide on final dispositions of incarcerated law violators (Fig. 4.1). Without law enforcement personnel, the courts' role in society would be severely curtailed.



The courts' primary purpose is to administer justice, that is, to settle disputes, interpret and apply the law, provide checks and balances restraining the executive and legislative branches of government, and administer judicial proceedings (Ferguson and McHenry 1959). This involves, but is not limited to:

- Fact finding
- Interpreting the meaning of obscure words and phrases in law(s) applied to concrete situations
- · Conducting trials and civil and criminal procedures (e.g., issuing summonses or warrants, setting bail, appointing grand or petit juries, admitting attorneys to practice, assessing and collecting fees, admitting evidence, implementing penalties enacted by legislatures)
- Examining, selecting, and appointing clerks,
 commissioners, messengers, stenographers, and other
 assistants
- · Handling noncontentious cases, i.e., those in which parties are not in dispute (e.g., administering estates, appointing receivers in bankruptcy, issuing licenses, performing marriages, naturalizing aliens).



Structure and Jurisdiction of Federal and State Court Systems

A dual system of courts exists in this country--a Federal system and a State system.

The two systems are sovereign and often foreign to each other. Although the structure of the federal court system is uncomplicated and precise, no such simple universality exists in state court systems. Few states have identical courts with identical patterns of jurisdiction. Even within a state, it is often difficult to detect similarities between courts of the same title from county to county, or from judicial circuit to judicial circuit (Chamelin et al. 1975).

Federal Courts

The Federal court system is basically three-tiered. The Supreme Court is at the apex, the 12 U.S. Courts of Appeals at the intermediate level, and the 95 U.S. District Courts and Territorial Courts at the bottom of the pyramid. A number of other specialized courts are also in the Federal system (Chamelin et al. 1975) (Fig. 5.1).

The Supreme Court of the United States is the highest tribunal (and generally the court of last resort) in our dual system of courts (State and Federal). Its role is "not to right every wrong in the lower courts, but to resolve major issues in the law and to set policies for the rest of the system. The Court chooses its cases accordingly" (Berkley et al. 1976). (Unlike most other courts, the Supreme Court can decide which cases it will hear.) The nine justices constituting the Court hear cases from a



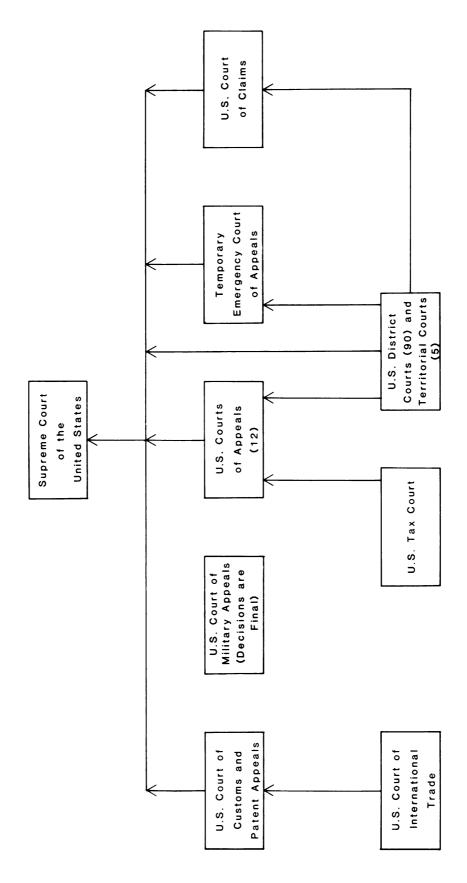


Figure 5.1. The United States Federal court structure. A more detailed explanation of these courts and their relations to one another can be found in The United States Government Manual.



variety of sources. Although the Supreme Court has original jurisdiction in some cases, most of its work involves settling appeals from the U.S. Courts of Appeals and from State courts of last resort, if a Federal question is at issue. It also hears a lesser number of cases from special Federal courts or on direct appeal from U.S. District Courts (Berkley et al. 1976).

Each of the 12 <u>U.S. Courts of Appeals</u> (on the second level of the Federal court system) reviews orders issued by administrative and regulatory agencies for errors of law and hears both civil and criminal Federal cases on routine appeal from U.S. District Courts within its geographic area (circuit). (The States and U.S. territories are divided into 11 circuits. The District of Columbia constitutes the 12th circuit.) These cases, involving difficult and complex legal questions, are decided by a three-judge panel.

The 90 <u>U.S. District</u> and five <u>Territorial Courts</u>, the main Federal trial courts, are on the third level of the Federal system. (Each State has at least one U.S. District Court.) Usually one judge presides over each of these courts. With or without a jury, the judge hears and decides civil cases (dealing with bankruptcy, fraud, patents, and many other violations of Federal laws) and criminal cases (dealing with Federal crimes such as treason, kidnapping, or incendiarism). <u>U.S. Magistrates</u> appointed by U.S. District Court judges have some, but not all, of the powers of the judges. They conduct many of the preliminary or pretrial proceedings

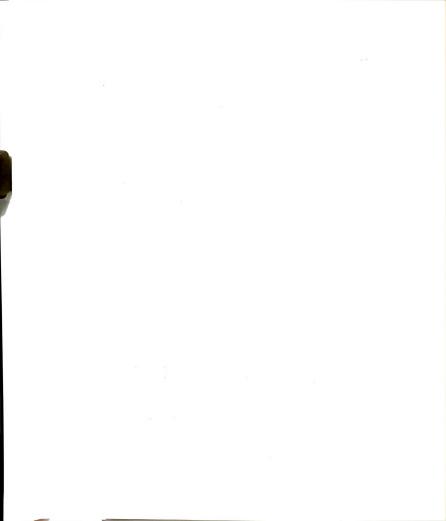
(e.g., issue warrants, fix bail, hold preliminary hearings) and try, without a jury, misdemeanors—those punishable by imprisonment for 1 year or less or by a fine of \$1,000 or less, or both. In addition to U.S. Magistrates (and other court personnel), the U.S. District Courts are also assisted by U.S. Marshals, who supervise "federal prisoners and serve court writs and orders," and U.S. Attorneys, who "prosecute federal cases and represent the United States in civil cases" (Berkley et al. 1976). Each Federal District Court has one U.S. Marshal and one U.S. Attorney.

A number of special trial and appellate Federal courts with limited jurisdiction were created by Congress to deal with particular types of cases. These courts include the U.S. Court of Customs and Patent Appeals, U.S. Court of Military Appeals, Temporary Emergency Court of Appeals, U.S. Court of Claims, U.S. Court of International Trade, and U.S. Tax Court.

State Courts

As noted earlier, it is an impossible task to attempt a uniform explanation of state and local systems. The variances in functions, jurisdiction, and even titles are so great that no simple statement can have universal acceptance. . . The court system in a particular state may consist of two, three, four, or more levels of courts. Where the levels are fewer, the functions and jurisdictions of each level may be broader (Chamelin et al. 1975).

As in the Federal Government, a State Supreme Court (also known as the Court of Appeals, Supreme Court of



Appeals, Supreme Judicial Court, Supreme Court of Errors, or Court of Criminal Appeals) is the highest State judicial tribunal and hears selected appeals from intermediate courts of appeal and/or from major trial courts. State Supreme Courts are "the ultimate and final interpreter of state constitution and laws unless federal law or some aspect of federal law is involved" (Rosenbauer 1978).

Intermediate appellate courts (called Superior Courts, District Courts of Appeals, Appellate Courts, or Supreme Courts in some States) form the second level of courts in less than half of the States. States that are divided into districts have more than one court at this level, although most of the courts have statewide jurisdiction. State appellate courts hear both civil and criminal cases on appeal from lower trial courts, and many of their decisions based on these cases stand as law.

Major trial courts (known as Circuit Courts, District Courts, Superior Courts, or State Courts) usually serve a "district or circuit comprised of several counties, but in a few states a major trial court may be located in each county" (Berkley et al. 1976). They not only have original jurisdiction in serious or important civil and criminal cases, but they also review decisions of State administrative agencies and "handle appeals from . . . minor courts although these cases are generally heard as completely new trials" (Rosenbauer 1978).

Minor trial courts, of limited and special jurisdiction in both rural and urban areas, serve as the primary entry point for those who become involved in the judicial process.

For those millions of Americans who . . . [go before the courts] for minor offenses, including traffic violations, these lower courts serve as the only contact with the judiciary. Ninety percent of all criminal cases are heard in these lower courts. Historically, the lower courts are most important to the . . . [legal] system because of the sheer number of cases handled. They are also the portion of the American judicial system most visible to the public (Chamelin et al. 1975).

The Forest Service and the Courts

Violations of Federal statutes and Forest Service regulations are prosecuted in Federal District Courts, whereas State, county, or city courts handle violations of State laws and county or city ordinances. Either State or Federal courts (or both) may hear cases involving violations of Federal and State criminal laws covering the same offense. Civil cases are taken either to U.S. District Courts or to the U.S. Court of Claims, depending on the damages sought.

When the Forest Service takes civil or criminal cases to court, the cases are generally tried before U.S. Magistrates or U.S. District Court judges. (There are 17 U.S. District Courts in Region 9 alone.) In addition to hearing Federal civil cases, the U.S. Magistrates try and sentence persons charged with violating regulations contained in 36 CFR 261



(protection, occupancy, and use of National Forest land). 11 Violations of these regulations are petty offense (low) misdemeanors. In some judicial districts, however, the U.S. Magistrates may be authorized to try and sentence persons charged with more serious (high) misdemeanors, usually handled by the District Court judge.

U.S. District Court judges, on the other hand, try cases beyond the jurisdiction of the U.S. Magistrates, e.g., they usually hear more serious civil cases, criminal cases such as Federal felonies and high misdemeanors, and cases in which a person accused of committing a petty offense misdemeanor refuses to be tried before a U.S. Magistrate. District Court judges may also issue injunctions. Both the U.S. Magistrates and District Court judges issue search and arrest warrants, subpoenas, and summonses to Forest Service law enforcement personnel authorized to administer them.

Violators of State and Federal laws covering the same incident are prosecuted in State courts when the U.S. Attorney declines prosecution in favor of the State. The U.S. Attorney may decline to prosecute a case due to a heavy

¹¹Not everyone cited for violating a Forest Service regulation must appear before a U.S. Magistrate. This depends not only on the discretion of the Forest Officer issuing the violation notice, but also on the local rules of the Federal District Courts, which maintain lists of petty offense misdemeanors that can be remedied by paying fines and petty offense misdemeanors that require a mandatory court appearance. Most offenders post collateral in the amount set by the court, waive appearance before the court, and consent to forfeiture of the collateral.

case load and give permission to the Forest Service to prosecute in State court. U.S. Attorneys normally prefer State prosecution of cases when State or local law enforcement agencies have conducted the investigation and apprehended the violator. Juveniles suspected of violating Federal laws and regulations can be prosecuted in Federal courts only after U.S. Attorneys have received authorization from the Attorney General to initiate such an action.

Up to this point, I've described the four components of the American legal system—legislative groups, legislated laws, enforcement agencies, and courts—and their relations to one another and to the Forest Service (left side of Fig. 2.1). What remains is how individuals (suspected, charged, proven, and incarcerated law violators) enter, move through, and leave the legal system—that is, how the system processes its human inputs and outputs (right side of Fig. 2.1). The following two sections, civil process and criminal process, describe in greater detail the routes people take through the legal system.



CHAPTER VI

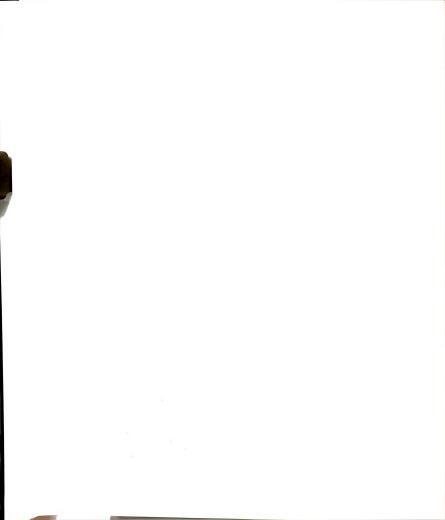
CIVIL PROCESS

Basically, the civil process is the procedure through which a person¹² with a claim against another can institute an action (lawsuit) in court and seek a remedy for a violation of his or her personal or property rights.¹³ Its purpose, therefore, is to rectify a noncriminal wrong by compensating the person wronged.

Noncriminal or civil wrongs can be divided into two major types—breaches of contract and torts. A contract is a definite agreement, written or oral, between two or more competent persons that creates a legal obligation and is enforceable in the courts. If one party to a contract fails to do what he or she had agreed to do, he or she has breached the contract and the other person usually is

¹²Parties to a lawsuit or civil action (plaintiffs and defendants) can include not only individual citizens but also groups of citizens, partnerships, companies, corporations, and Federal, State, or local governments. To simplify my discussion of the civil process, I will assume that parties to a lawsuit are two individuals.

¹³Guaranteed under the law and protected by law, personal rights granted to people in our society include 1) the right to personal liberty, 2) the right to personal safety, 3) the right to be secure in ownership of property, and 4) the right to enjoy a good reputation. A violation of any one of these rights constitutes a civil wrong (Dolan 1972).



entitled to some form of remedy. A tort, on the other hand, is an injury that one person, either intentionally or negligently, does to the body, property, or reputation of another (Dolan 1972). It's an invasion of any private or personal right which each of us has by virtue of the law and a wrong for which the law provides relief. According to Dolan (1972).

The principal torts are: <u>false arrest</u>, <u>false</u> imprisonment, and <u>malicious prosecution</u>, each of which violates the right to personal liberty; <u>defamation</u> (<u>slander</u> and <u>libel</u>), which violates the right to a good reputation; <u>assault</u> and <u>battery</u>, which violate the right to personal safety; and <u>negligence</u>, which violates not only the right to personal safety but also the right to be secure in the ownership of property.

Other torts violating the right to be secure in property ownership are trespass and conversion (taking someone else's property for one's own use). "Personal rights are most frequently violated by someone's negligent behavior. In any year negligence accounts for thousands of lawsuits and takes up more court time than any other kind of action" (Dolan 1972). 14

¹⁴Negligence is at issue in many Forest Service tort claims. According to Chandler et al. (In press),

In law, negligence is the opposite of diligence and signifies the absence of care. It implies a failure of duty, but excludes the idea of intentional wrong. Negligence is not absolute or intrinsic, but always relative to some circumstance of time, place or person. The test of negligence is what should be expected of a reasonable person acting with proper regard for others under the same circumstance.

A number of judicial remedies are available to people whose personal or property rights have been violated, but the most well known of these are money damages, injunctions, and specific performance of contracts. Money damages, the most common remedy for civil wrongs, are available to plaintiffs in nearly all types of civil complaints, whether based on breaches of contract or on torts. In most cases. however, money damages are not a specific form of relief, i.e., plaintiffs are not given precisely what they are entitled to under the law but are paid money damages In lawsuits for breaches of contract, plaintiffs seek damages that will place them in positions they would have been in had the defendants fulfilled their part of the contracts. In tort actions, on the other hand, the object of money damage awards is to place the plaintiffs in positions they would have been in had the defendants not violated their rights.

Money damages can be classified in three ways:

- Nominal damages are awarded to plaintiffs when the injuries suffered are considered slight. The plaintiffs may receive a trifling amount to remedy violations of their rights and to compel defendants to pay for court costs.
- <u>Punitive</u> damages are awarded to plaintiffs over and above those actually suffered as a means of punishing defendants for their malicious or vicious conduct.



- Compensatory damages, awarded in most civil cases, compensate plaintiffs for losses suffered. These damages include not only all out-of-pocket losses (e.g., repair, restoration, or replacement costs of damaged property; lost wages; medical bills), but also general compensation for pain, suffering, injury, humiliation, and emotional upset caused by the defendant's misconduct.

Injunctions, specific performance of contracts, and similar remedies for civil wrongs differ in several respects from damage remedies. First, they are regarded as extraordinary remedies, granted only if plaintiffs prove that money damages are inadequate. Second, they are specific in that the plaintiffs—in lieu of money—are given the very thing to which they are entitled. Third, injunctions and similar equitable remedies look to the future rather than to the past; the defendants are ordered either to do or not to do certain actions in the future. (The damage remedy looks to the past—to compensate plaintiffs for what defendants have done to cause the plaintiffs damage or injury.)

Generally, an injunction, the most common form of "specific" remedy, is a court command or order to a defendant to refrain from particular acts that he or she is doing or threatening to do. Specific performance, on the other hand, is a court order requiring the defendant to do the act he or she had promised to do in a contract.

.

En lagren En lagren En lagren

.

The process through which a person with a claim against another can institute a lawsuit in a court and seek a remedy for a civil wrong is described in detail in Appendix E.

The Forest Service and the Civil Process

Because the Forest Service annually experiences hundreds of violations of its rights resulting in millions of dollars in losses, ¹⁶ it often needs to rectify these wrongs through the civil process.

The Forest Service regularly faces both breaches of contract and torts. A typical timber breach of contract occurs when the Forest Service sells timber to a contractor who doesn't finish harvesting the stand. By far the most usual tort is property trespass, including both timber and fire trespass. The former can occur when a person buys and harvests trees from a private landowner but also accidentally or intentionally cuts down trees belonging to the Government and the latter when a fire on private land burns out of control onto National Forest land.

¹⁵ Webster's New World Dictionary (1968) defines a claim as "a demand for something rightfully or allegedly due; assertion of one's right to something."

¹⁶At least twice as many claims are filed against the Forest Service (causing the Service to be the defendant) as the Service files against individuals and organizations (when the Forest Service is the plaintiff). This dissertation however, is primarily concerned with those claims that the Service (as the plaintiff) files to defray losses to the U.S. Government.



When it has experienced a breach of contract or a tort, the Forest Service has the same judicial remedies available as a private citizen, e.g., money damages, injunctions, and specific performance of contracts; but damages are the most common form of remedy sought. Because the Service does not have statutory authority to initiate lawsuits, its legal proceedings, except for cases taken to Small Claims Court, are generally handled by the OGC and U.S. Attorneys.

In fire trespass cases, for example, a U.S. Attorney may file claims on behalf of the Forest Service against the trespassers, not only for resources damaged or destroyed by fire, but also for fire suppression costs, which are generally ten times greater than resource damages. 17

Potentially, all of the 6,615 human-caused fires occurring on National Forest lands in 1980 were fire trespass cases (USDA Forest Service 1975-1980); however, trespassers cannot always be identified and, therefore, required to pay for their civil wrongs. As a result the Forest Service attempts to collect damages each year for approximately one-sixth of the human-caused fires occurring on the National Forests. 18

¹⁷ Estimate from Michael J. Danaher, OGC Attorney, in a telephone conversation, October 16, 1981.

¹⁸ Estimate from Ernest V. Andersen, Group Leader, Law Enforcement, USDA Forest Service, Washington, D.C. in a telephone conversation, November 13, 1981.



All Forest Service employees are responsible for notifying their supervisors of incidents that may result in claims for the Government. Following such reports, personnel such as Regional Office Directors, Forest Supervisors, and District Rangers gather as much factual information as they can regarding the incidents and report their findings to appropriate Claims Officers. Special Agents or Safety and Health personnel (depending on the nature of the incident) may then investigate the incident more thoroughly. The evidence developed through extensive investigation is the basis for cases referred through the OGC to the Department of Justice for possible court action. This evidence can, however, also be used to settle claims before going to court.

The Federal Claims Collection Act of 1966 (31 USC 951-953) requires Governmental agencies such as the Forest Service to attempt claims collection from those who have caused losses to the Government. The Act delineates procedures, which I call the demand-for-payment process, that should be used to settle claims. Whenever there is any doubt about specific procedures to follow, the Forest Service consults OGC field office representatives (called Regional Attorneys or Attorneys-in-Charge) for advice and recommendations.



Settlement Before Cases Reach Court: Demand-for-Payment Process 19

The Forest Service Chief has designated Regional and Research Support Services personnel as Forest Service Claims (In the Washington Office, the Group Leader of Washington Office Fiscal Support serves as Claims Officer.) Subject to requirements of the Regional Forester or Station Director, these Claims Officers are authorized to issue "demand for payment" letters for claims in any amount above \$35 and to accept payments settling those claims. 20 Regional Claims Officers can likewise authorize Forest Administrative Officers such as Forest Supervisors to make claims of \$10,000 or less, issue demand letters, and accept payments. Forest Supervisors can, in turn, authorize District Rangers to issue demand-for-payment letters and accept payments for \$600 or less. Claims under a Region's or Station's authority are referred to the Chief's office for processing if Claims Officers are uncertain about appropriate action to take, if Forest Service policy is involved, or if claims exceed predetermined dollar amounts.

¹⁹The Forest Service uses some special procedures for administratively handling timber breach of contract disputes before going to civil court; they are outlined in FSM 2433.7 and 2433.8.

²⁰In some circumstances, claims are immediately referred to the OGC, e.g., when fraud is suspected or when someone violates antitrust laws. Collection action is not initiated on claims less than \$35.



1. <u>Initial demand-for-payment letter</u>. ²¹ Based on investigative reports, the first demand-for-payment letter informs a debtor of the reason for and the amount of indebtedness, the date payment is due, the interest that will be charged for late payment, and other consequences of the debtor's failure to cooperate.

The Forest Service official (e.g., Claims Officer, Forest Supervisor, District Ranger) who sends the demand letter and bill includes evidence to support the Agency's claim, e.g., an itemized bill for completed repairs; the value of the damaged or destroyed property immediately before the incident, less salvage value, if any. (See FSM 6572.25a "General Resource Damages.")

2. Followup billing. If the Agency does not receive the debtor's payment by the requested date, the appropriate Forest Service officer pursues collection with aggressive followup billing, unless a response to the first demand indicates that further letters would be futile. Usually, progressively stronger written demands, issued at 30-day intervals, are sent to the debtor. (See 4 CFR 102.2.) Each followup bill includes the interest added and the new payment due date.

²¹When a U.S. Magistrate or other judicial authority has sentenced an offender in a criminal case to pay the U.S. Government for damages, demand-for-payment letters are not necessary. The Forest Service's role in such circumstances is to alert the judicial authority promptly when the offender has or has not paid.



Several Forest Service Claims Officers have estimated that only 10 to 20 percent of demand letters result in compensation for losses.

- 3. <u>Personal interview</u>. The Federal Government expects agencies such as the Forest Service to conduct personal interviews with their debtors whenever feasible. This step may occur at this point or earlier.
- 4. Small Claims Court. Recently, the Department of Justice and the OGC agreed that the Forest Service has the authority to settle smaller claims in Small Claims Court, in part because it's so costly to take a case to Federal court (at least \$600 for even a simple, uncontested claim). Small, unpaid claims can, therefore, be taken to Small Claims Court if the demand letters have been ineffective. Depending on the State, small claims settlements are generally between \$150 and \$1,000. Because limitations and procedures differ in various courts, Forest Service officials obtain advice about Small Claims Courts from their nearest OGC office. 22
- 5. Referral to OGC Field Office. 23 If a Claims Officer has

²²For a clear explanation of procedures to use when filing a claim in a Small Claims Court, see Consumer Reports, November, 1979, vol. 44, no. 11, pp. 666-670; and/or The 1979 Buying Guide Issue of Consumer Reports, December, 1978, vol. 43, no. 12, pp. 357-358.

²³As of this writing, the USDA is considering using private collection agencies to collect certain claims. If these services are used, it is likely that those claims appropriate for referral to collection agencies will not be referred to the OGC for legal action unless the collection agency is also unable to get a debtor to pay.



attempted the collection methods above, and payment, compromise, suspension, or termination of those debts has not occurred, ²⁴ then he or she refers those claims to the Regional Attorney/Attorney-in-Charge in the local OGC field office for advice. All requests for legal action sent to the OGC include the following (see FSM 6572.18a):

- a. a summary of action already taken to collect or compromise the claim;
- b. proof that payment demands and compromise efforts were made by the Forest Service;
- c. evidence that demands for payment from surety or insurance firms (or statements of nonapplicability) were made by the Forest Service;
- d. a statement that a personal interview with the debtor was held to collect or compromise the claim (or, if the interview was omitted, the reason for the omission);
- e. the current address(es) of parties involved (or evidence that sufficient efforts were made to locate missing persons);

²⁴Forest Service Claims Officers can compromise, suspend, or terminate collection actions, except when civil claims involve fraud, exceed \$20,000, or the debt is clearly covered by insurance or bond. When termination or compromise of a debt between \$10,000 and \$20,000 is being considered (or doubtful claims under that amount), Claims Officers obtain the advice of the appropriate OGC office. Claims Officers do not have to contact the OGC about most claims under \$10,000. (See FSM 6572.15a and 6572.16a.) Only the Departments of Justice and Treasury have authority to accept a debtor's offer of compromise when the claim exceeds \$20,000. (See FSM 6572.15b.)



f. current credit data showing that collection is possible.

Except for breach of contract cases, if the field office OGC attorney believes that a legal proceeding is likely to result in reimbursement to the Government for damages, he or she can refer certain claims directly to an appropriate U.S. Attorney. These claims are either \$100,000 or less, if they arise from such activities as unauthorized timber cutting and human-caused fires, or \$60,000 or less, if they arise from other activities. Claims greater than these figures must be referred to the Chief of the Forest Service.

- 6. Referral to the Chief's Office. After the OGC field representative has given a recommendation for action on claims above \$100,000 or above \$60,000, the Claims Officer sends those claim files to the Chief. The claim files include the material discussed in Step 5, the original copy of the investigative report, and the OGC field office representative's recommendation for action.
- 7. Referral to the OGC Washington Headquarters by the Chief. The Chief examines the claim files referred to the Washington Office and generally follows the OGC field representative's advice in referring the claim to the Washington OGC.
- 8. Referral to the Department of Justice by the OGC. If the OGC determines that the facts developed in the request for legal action can support a lawsuit in civil court, the OGC promptly refers the claim to the Department of Justice.



9. Action by the Department of Justice. The Department of Justice determines whether or not a lawsuit is warranted. If legal action is taken, a U.S. Attorney initiates a lawsuit in a U.S. District Court. The process that is followed is the same as that outlined in Appendix E, starting with Step 2, "Filing a lawsuit."

The Forest Service's role in a lawsuit differs according to the case. For instance, an employee having first notified a supervisor of an incident resulting in a claim may be called on to act as a witness as might employees who investigated the case. Special Agents may assist U.S. Attorneys through the entire civil process—from serving subpoenas and gathering evidence to locating witnesses who can testify against the debtor.

If legal action is not taken, the Department of Justice may attempt an administrative collection or compromise, close the case, or advise the OGC of additional action that should be taken by the Forest Service.



CHAPTER VII

CRIMINAL PROCESS

The criminal process is a method by which the legal system handles individual criminal cases; it's an orderly progression of events, starting with a detected and reported crime and concluding with the unconditional release of a law violator. It is designed to: 1) punish proven law violators, 2) remove dangerous people from the community, 3) deter others from criminal behavior, and 4) transform law breakers into law-abiding citizens (Appendix F) (Chamelin et al. 1975). (For a discussion of the similarities and differences between the civil and criminal processes, see Appendix G.)

Most crimes, originally determined by English common law, have now been defined by statute. These statutes, both State and Federal, declare what conduct is criminal and prescribe the punishment to be imposed (via the criminal process) for such conduct. (Title 18 of the United States Code contains Federal crime statutes. See Appendix B for two such examples.) A crime, therefore, is an act (or failure to act) violating a criminal law that is punishable, upon conviction, by 1) fine, 2) imprisonment, 3) removal from office, 4) disqualification to hold any office of honor,



trust, or profit and/or 5) death (Black 1979). Even though a crime may and often does involve injury to some individual, it is considered an offense against the public and is punishable as such.

Although crimes can be classified in any number of ways, they are most often divided into felonies and misdemeanors. 25 The distinction between the two is based either on the type of institution in which an offender may be incarcerated or the length of imprisonment (or sometimes a combination of both). Federal and many State statutes define a felony as an offense punishable by death or by imprisonment for more than 1 year in a Federal or State penitentiary. Examples of felonies include murder, rape, aggravated assault, incendiarism, kidnapping, and burglary. Likewise, under Federal and most State statutes, crimes that are not felonies are generally called misdemeanors. Most are punishable by fine or by imprisonment for 1 year or less in a municipal or county jail. Sometimes misdemeanors are classified as high or low (petty offense) misdemeanors. High misdemeanors, carrying more than a 6-month sentence and larger fines, are considered serious. while low misdemeanors are considered less serious. The penalty for the latter does not exceed 6

 $^{^{25}}$ Crimes are also commonly classified into the following categories: person or property; street, organized, or white collar; <u>mala in se</u> or <u>mala prohibita</u>; infamous or not infamous; <u>major or petty</u>; common law or statutory; involving moral turpitude or not involving moral turpitude.



months in jail or a fine of \$500, or both. Examples of misdemeanors are criminal trespass, allowing a fire on National Forest land to escape control, disturbing the peace, assault, and vehicular homicide.

Because the subject of crime and criminal law is too extensive to cover in this dissertation, I suggest the reader consult criminal justice texts for additional information. These texts discuss in greater detail subjects such as types of crime, general doctrines and principles of criminal law, elements of a crime (act and intent), parties to a crime (principals and accessories), capacity to commit crime, and rules of evidence.

The Forest Service and the Criminal Process

Criminal acts against the Forest Service and consequently the public, i.e., felonies and misdemeanors including petty offenses, are found in Title 18 USC, Crimes and Criminal Procedure, and in 36 CFR 261, Prohibited Acts. Crimes involving fire are defined by 18 USC 1855--Fire willfully set to timber, brush, or grass--(a felony), 18 USC 1856--Fires left unattended and unextinguished--(a petty offense misdemeanor), and 36 CFR 261.5, fire regulations (also petty offense misdemeanors).

Forest Service involvement in the criminal process—which the Agency defines as a proceeding instituted and conducted for the purpose of fixing guilt for a crime already

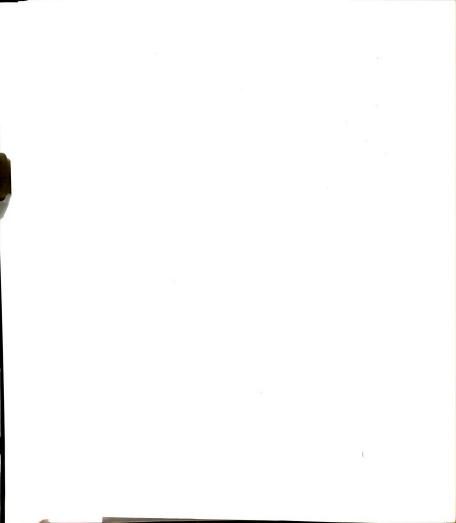


committed and punishing the offender—is limited primarily to Steps 1 - 3 of the process (Appendix F). That is, the Agency focuses on detecting and reporting criminal offenses, identifying offenders, investigating criminal acts, arresting suspects if necessary and taking them into custody, issuing violation notices, serving summonses, and filing complaints.

A violation occurs when any person commits an act or omission in violation of Federal, State, county, or municipal statutes, regulations, or ordinances related to the National Forest System. Fire violations fall within three basic categories: 1) the willful setting of a wildfire or the deliberate burning of a building or vehicle regardless of whether it escapes to surrounding lands, 2) negligently causing a wildfire, or 3) violating statutes or regulations pertaining to wildfire prevention.

Forest Officers initiate the criminal process in cases involving violations of these statutes, regulations, or ordinances if 1) the violations were committed in their presence on National Forest land or if 2) witnesses sign statements that crimes were committed in their presence and that they're willing to testify in court. Once the crimes have been detected and reported, Forest Officers have several alternatives.

If a violation was committed in the presence of a Forest Officer and immediate action must be taken to prevent



serious damage, the violator's escape, or loss of material evidence, or if a Forest Officer has probable cause to believe a felony has been committed or is about to be committed, the Officer can make an arrest without a warrant if it can be done reasonably safely. Although all Forest Officers have the authority to make arrests for violations of Federal statutes and regulations relating to the National Forest System, arrests are normally made by Special Agents or other specially trained and equipped Forest Officers. most cases Forest Officers are encouraged to initate action leading to an arrest with a warrant. This involves, in coordination with the OGC, filing a complaint -- a formal, written accusation charging that an individual has violated a Federal statute or regulation -- with a U.S. Magistrate who, in turn, will usually issue a warrant for the suspect's (A summons may also be issued at this point, in lieu of arrest.) When the warrant is served by a U.S. Marshal, a Special Agent, or a Law Enforcement Officer (or the violator surrenders voluntarily after receiving the summons), the suspect is taken without unnecessary delay before the nearest U.S. Magistrate within the judicial district where the offense occurred. If the Magistrate is unavailable, the arrested prisoner may be held in temporary custody in a city or county jail approved for Federal prisoners until his or her initial appearance before a U.S. Magistrate. (For a continued explanation of the process see Step 6 and following in Appendix F.)



For the great majority of observed violations that are petty offense misdemeanors, Forest Officers issue verbal warnings, written warnings, or violation notices. Verbal or written warnings are generally given if violations occurred due to inadvertance, lack of understanding, or misinformation. If warranted, a violation notice will normally be issued in person to the violator at the time the petty offense occurs. If circumstances dictate otherwise, however, the violator may be cited at a later time (or the Forest Officer may sign a complaint before a U.S. Magistrate).

Petty offense violations can be disposed of by paying fines set by the court or through mandatory or voluntary appearances before U.S. Magistrates. If violators pay fines by mail, their cases are closed. If they opt to or are required to appear before a U.S. Magistrate rather than pay fines, they will be tried summarily, found guilty or not guilty, and sentenced. (If a person refuses to be tried by a U.S. Magistrate, he or she has the right to be tried in a U.S. District Court.) When violators do not pay their fines by mail or appear in court, the court either sends letters

²⁶ Discretion may not be used when a violation of 36 CFR 261 results in loss or damage greater than \$100, acts are clearly malicious, willful, or deliberate, or the safety or rights of others are jeopardized. In petty offense cases where the violator aggravates the situation through abusive behavior, the Forest Officer has the discretion to cite the violator for a mandatory appearance before a U.S. Magistrate.



demanding payments or issues summonses to appear in court. If the violators do not respond to the letters or summonses, warrants will be issued for their arrests. They will be arrested by U.S. Marshals and taken before the nearest U.S. Magistrate for bail hearings. Trial dates will also be set at that time.

In most instances, the Forest Service initiates prosecutions by issuing violation notices, but in addition to the other means such as immediate arrests or filing complaints in coordination with the OGC, Forest Officers can prepare written case reports, based on their investigations of violations, ²⁷ for a U.S. Attorney to review. ²⁸ Liaison with the U.S. Attorney is made through an OGC field office, although local procedures approved in advance by the OGC may

²⁷ Forest Service investigations (searches for facts and evidence) are initiated and continued until responsibility for violations is established or until every reasonable lead has been exhausted. Normally, violations of both Federal and State laws pertaining to the National Forest System will be enforced and investigated by the Forest Service. Violations of State or local laws will be referred to the appropriate State or local law enforcement agency and prosecuted by State or county prosecutors. Wildfires are investigated by employees trained to determine the fire's origin, cause, and person(s) responsible, as well as other elements necessary to establish criminal and civil liability. A Special Agent is notified immediately of a wildfire if suppression costs are expected to exceed \$40,000 and/or the wildfire is suspected of being willfully set.

²⁸Cases not handled by violation notices are submitted through an OGC attorney to a U.S. Attorney who authorizes or declines prosecution of each. Besides prosecuting cases for the Forest Service, U.S. Attorneys also assist Forest Service Officers in preparing or securing Federal complaints, information, or warrants.



allow Special Agents and Law Enforcement Officers to contact the U.S. Attorney directly in criminal cases. If the U.S. Attorney decides to prosecute, he or she will either file an information, charging an individual with violating a Federal statute or regulation, or seek a grand jury indictment. the latter case, the Forest Officer who prepared the case report for a particular violation will be required to testify before a grand jury. If the grand jury returns a true bill based on the Forest Officer's testimony, a court trial will be scheduled. Further action by a Forest Officer, at the discretion of the U.S. Attorney, may involve his or her appearance as a witness during the trial. District Courts are used to try felonies when a suspect refuses to be tried by a U.S. Magistrate or when a U.S. Magistrate is not designated to try a violation for a particular criminal act. Other cases, generally petty offense misdemeanors, are usually handled by U.S. Magistrates, although in some districts they can also try and sentence people charged with high misdemeanors.

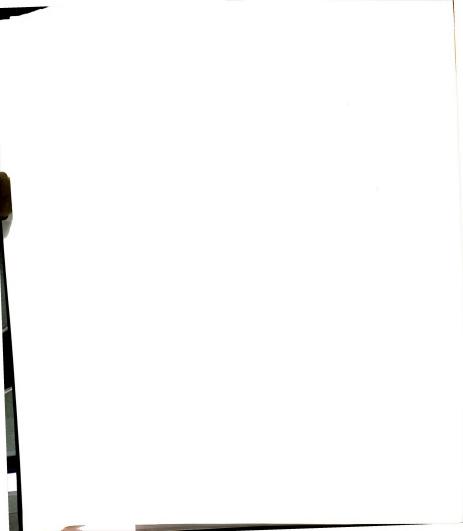


CHAPTER VIII

TRENDS IN AND CURRENT STATUS OF FOREST SERVICE LAW ENFORCEMENT

Although the Forest Service interacts in varying degrees with all of the components of the American legal system—legislative groups, legislated laws, enforcement agencies, and courts—most of its activities are concentrated under the realm of law enforcement and enforcement agencies. This chapter traces the development of Forest Service law enforcement and describes some of the problems limiting the Agency's enforcement efforts.

Law enforcement is not the primary mission of the Forest Service. Rather, the Service is a resource management agency that uses law enforcement to enhance its management activities. As a supportive function within the Agency, Forest Service law enforcement has a unique history and place in National Forest management. The early-day forest rangers, armed and riding horseback over mountain trails, were essentially custodians of the newly-created National Forests, protecting them against wildfires, game poachers, timber and grazing trespassers, and exploiters (Bergoffen 1976). As the need for law enforcement seemingly decreased



in subsequent years, it became a lower priority on the National Forests, and the "cowboy" image gave way to the less conspicuous, uniformed steward of the land.

Until the late 1960's, land managers with resource-related backgrounds were attuned to managing environments that were relatively free of people and of illegal or unauthorized activities (USGAO 1982). As a result, law enforcement continued to receive a relatively low priority. It was not only difficult to prosecute cases in court, ²⁹ for example, but Forest Service law enforcement advocates and practitioners were often looked upon with disfavor.

Since the late 1960's, however, increasing numbers of people have been attracted to Federal lands for a number of reasons including the forests' valuable natural resources, remoteness, and recreational opportunities. With changing technology, population increases, and changing times, the magnitude and seriousness of crimes have been increasing on National Forests (USGAO 1982).

Ralph Dyment, Region 4 Special Agent, attributes the rapid increase in crime on National Forests to "more misfits and loners - those people who choose to live outside the law - . . . trying to make their homes in National Forests" (Eldredge 1981). Dyment also cited the increased illicit

²⁹Cases went before U.S. Commissioners, who gave them low priority (U.S. Magistrate positions weren't created until 1972), and a system of collateral forfeiture had not yet been instituted.



use of National Forests for the exchange, cultivation, and transportation of narcotics. A recent U.S. General Accounting Office (GAO) report (March 1982) concurs with Dyment. According to the report, land managers are increasingly faced with the following illegal or unauthorized activities: 1) crimes against people and their property (e.g., burglary, larceny), 2) marijuana cultivation, 3) trespass (e.g., unauthorized occupancy, paramilitary activities, garbage dumping, grazing violations, cultural artifact theft), and 4) timber thefts.

Even with this increase in crime, a wide range of views on law enforcement in the Forest Service still exists today. The traditional approach dictates keeping a low profile, which means in some cases doing nothing, and views law enforcement as little more than "meter maid" duties and responsibilities. Indicators of such an approach in the past include the relatively few people involved in law enforcement, the lack of carefully structured training standards, and the over-extended use of Level II and III Forest Officers beyond their training capabilities.

A more recent approach dictates strengthening law enforcement programs and activities and increasing their visibility. The trend, in fact, appears to be swinging from the "low profile" policy to realizing the vital role of



law enforcement in the Forest Service, 30 seeing a need for armed officers, and understanding the law enforcement/Good Host relationship. Land managers are beginning to realize that the Host program is not negated by good law enforcement. On the contrary, when the Forest Service prevents individuals from committing unlawful acts on forest land, it is ensuring that the goals of protecting life, property, and the constitutional rights of citizens are attained.

Even though the Forest Service perceives the need for improved law enforcement efforts, some problems remain:

- Although the Forest Service has spread responsibility for law enforcement throughout the Agency, law enforcement activities are handled by relatively few Forest Service

³⁰ Special Agent and Law Enforcement Officer positions, for example, are relatively new. Special Agent positions on the National Forests were originally created to deal with wildfire problems in the South (Region 8 had the first Special Agents in the 1950's) but have since become more diversified. Although in the early 1960's agents were placed in Forest Service Regional Offices, they did not have positions in the Washington Office until the early 1970's. Special Agents have increased from approximately 30 in 1974 to 100 in 1982.

Law Enforcement Officer positions were finally established in 1972 in response to a need for professionally trained people (for generalists as opposed to specialists) to handle recreation problems on the National Forests. Their numbers have increased from zero in 1971 to 485 in 1981.

According to one Regional Special Agent, prior to 1978, law enforcement training standards were vague, ambiguous, and inadequate; a 3-day (24-hour) training session, for example, was considered enough background to write a violation notice, and a 2-week (80-hour) session, including the 24-hour session, was considered "advanced" training. In 1978, however, more rigorous minimum training standards for Level I-IV Forest Officers (see FSM 5370) were developed and implemented to ensure adequate quantity and quality of training for people with law enforcement responsibilities.



personnel; of these, only a small number are thoroughly trained. Of the nearly 50,600 permanent, career—conditional, and temporary employees working for the Forest Service in the summer of 1981, only 13 percent had law enforcement training. Excluding those with Level II and III training (most spend only 5 to 20 percent of their working hours in law enforcement activities), the ratio of law enforcement personnel to all the other Forest Service employees drops even lower. The 485 Law Enforcement Officers (Level IV's) comprise less than 1 percent of the total employees in the Forest Service (1.5 percent if temporary employees are excluded), and the 100 Regional and other Special Agents, the only full-time enforcement personnel, constitute less than 1 percent of the employees (including or excluding temporary employees).

- Some Forest Service law enforcement employees have cited the limited number of hours most personnel spend in training and then in actual enforcement activities as reasons for weak law enforcement in the Forest Service and for not meeting Good Host program objectives. For example, more than half of those given Level II and III training are summer employees. While some of these employees return a second or third year, many do not. Law enforcement instructors have also observed that when many permanent employees begin Level III training, they've forgotten the basics learned in Level II. As a result, many of the additional 80



hours of training are spent relearning the lessons of the first 40 hours. Employees forget their earlier training primarily because they spend few working hours in enforcement activities—their duties consist mainly of forest-related field work.

According to the 1982 GAO report: 31

- Management constraints, e.g., travel, vehicle, and duty restrictions, are limiting efficient and effective enforcement activities.
- Although factors, including limited Agency resources and remote land, contribute to both the rise of crime on National Forests and the inability of the Forest Service to meet its enforcement responsibilities, the lack of management emphasis also aggravates these problems. While some managers have been slow to recognize and deal with enforcement-related problems, others do not believe that a serious problem exists. This is due in part to the lack of data on the magnitude and seriousness of illegal and unauthorized activities on public lands. (Unlike other Federal land management agencies, the Forest Service has

³¹ The objectives of the GAO review and subsequent 1982 report were 1) to identify the nature and extent of illegal and unauthorized activities on National Park Service, Bureau of Land Management, and Forest Service lands in Southwestern Oregon and California and 2) to assess the agencies' efforts to combat unlawful activities. Although the GAO study was conducted in a limited geographic area, its findings pertaining to the Forest Service can be generalized to the Service's law enforcement efforts outside Oregon and California.



developed a reporting system, called the Law Enforcement Management Reporting System [LEMARS], approved for use in October, 1981. Because the system is so new, however, statistics are just being developed.) Without such crime data, it's difficult for management at any level to determine the magnitude of the crime problem and assess the effectiveness and efficiency of law enforcement efforts.

- The Forest Service has, at a minimum, the power to impose and enforce regulations intended to prevent interference with proper management and utilization of public resources. Although the Agency's law enforcement responsibilities are in the regulations (and elsewhere), land managers do not consistently use their law enforcement responsibilities and authority. Furthermore, because the Forest Service does not have uniform, nationwide law enforcement policies, it allows Regional managers to set their own local policies. Marijuana cultivation, for example, may be treated one way by one Region and a different way by another Region; one Region can decline law enforcement responsibilities for marijuana cultivation, while another may cooperate with State and local law enforcement officials in marijuana eradication efforts.
- Citing one problem in particular, the GAO report maintains that Forest Service officials do not always enforce trespass statutes and regulations. The magnitude of



trespass occurrences is not known, but Forest Service managers and documents indicate that trespass violations are increasing. These violations result in restricted public and employee access, environmental degradation, revenue loss, increased costs to the Government, and endangered public and employee safety.

- Impediments to gaining greater Forest Service commitment to the law enforcement program include the general lack
of 1) understanding of the Forest Service's objectives and
policies, 2) knowledge of the actual on-the-ground
situation, and 3) confidence in the ability of law enforcement to complement management's other programs.

Given these problems, the GAO report suggests that:

- 1. More management emphasis is needed to enforce the present statutes and regulations in order to halt the widespread and increasing incidence of illegal and unauthorized activities on National Forests.
- 2. In order to improve enforcement efforts, the Forest Service must clarify the field offices' critical role by defining the law enforcement obligations and responsibilities of each employee.
- 3. Existing regulations should be revised to deal specifically with current crime situations, e.g., marijuana cultivation, timber theft, and trespass.



- 4. The level of law enforcement effort devoted to preventing and controlling criminal activities should be increased.
- 5. Where feasible, workforce, resource, and policy constraints impeding law enforcement efforts should be removed and emphasis and support should be given to preventive patrolling, providing vehicles when needed, and assuring adequate coverage by law enforcement personnel through improved duty assignments.

In addition to the GAO recommendations, some Forest Service employees have expressed their desires to see personnel with law enforcement duties and responsibilities attain professional status, to make law enforcement a separate function or division within the Forest Service (it's currently under Fiscal Management), to increase the number of Law Enforcement Officers (Level IV's) in the Agency instead of Level II's and III's, and to have a Special Agent assigned to every National Forest. 32

³²Because many forests do not have a Special Agent assigned to them, calling in an agent when special investigative assistance is needed is an unplanned expense. As a result, some forests needing a Special Agent's expertise seldom receive it. Thus, some law enforcement personnel have suggested assigning a Special Agent to a particular National Forest needing his or her services on a regular basis and establishing "zone agents," responsible for more than one National Forest, to National Forests with less severe crime problems and lower case loads.



Counteracting such changes is the strong desire to avoid a "police" agency in the Forest Service. As a resource management agency dealing increasingly with people and their criminal activities, the Forest Service must strike a balance between the need for increased law enforcement efforts to achieve its goals of prevention and protection of people, property, and resources, and the concern over becoming a "police" agency and presenting an undesirable public image.



CHAPTER IX

THE ROLE OF FOREST SERVICE LAW ENFORCEMENT IN WILDFIRE VIOLATIONS

Forest Service law enforcement efforts are not equally divided among the different functional areas. For example. nationally, 57 percent of the Agency's law enforcement effort is directed at forest recreation. Although fire receives significantly less enforcement emphasis than recreation (7.5 percent), it's still higher than other activities such as occupancy (6 percent), timber, range, and wildlife (4 percent each), employee protection and claims (3 percent), and archeology (2 percent). 33 These percentages may change, however, as the Forest Service responds to criminal activities developing on the National Forests. While the Service is calling for increased enforcement efforts in timber, employee protection, claims, and archeology, for example, it recommends that in upcoming years law enforcement efforts directed at fire remain the same.

³³ Each percent is equivalent to 16 person years. Information courtesy of Ernest V. Andersen, Group Leader, Law Enforcement, USDA Forest Service, Washington, D.C.

Wildfires were not mentioned in the main body of the GAO report (1982) as a serious law enforcement problem on the National Forests. Information from a number of wildfire reports ³⁴ indicates that, although incendiary fires (the worst human-caused fire problem) have increased dramatically on U.S. wildlands from 1972-1980, they have remained fairly static on the National Forests over the last several years (an average of 32 percent of human-caused fires on Forest Service land are caused by incendiarists).

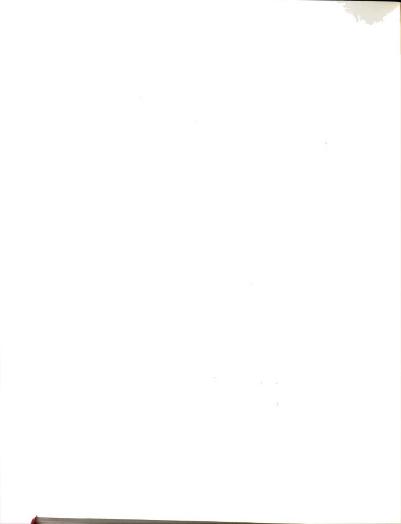
The current status of Forest Service law enforcement efforts directed at wildfire violations is summarized below: 35

All Reported Violations vs. Wildfire Violations

Ninety-three percent of all reported violations on National Forests were petty offense misdemeanors; 4 percent were high misdemeanors, and the remaining 3 percent were felonies. Approximately one-fourth of the petty offenses and two-thirds of the felonies and high misdemeanors were violations of Forest Service fire statutes and regulations.

³⁴Information was taken from both the USDA Forest Service Wildfire Statistics (1970-1981) and from the USDA Forest Service National Forest Fire Report (1975-1980).

³⁵LEMARS (Law Enforcement Management Reporting System) data used to compute percentages were supplied by the Forest Service Washington Office. Because LEMARS was recently formulated and implemented, data are incomplete; some Regions are not yet on the system, some are just entering it, and others have supplied substantial amounts of data. Data supplied by Regions 2, 5, and 9 from 1979-1981, the most reliable at this time, were used to compute the percentages here. Because the data are incomplete, my results are tentative.



Over half the cases involving all reported violations of Forest Service statutes and regulations were solved and completed; approximately one-fourth were completed but unsolved, and the remaining were either incomplete or not acted on. Fire violations comprised one-fourth of the solved and completed cases, one-third of the completed but unsolved cases, 30 percent of the incomplete cases, and 40 percent of the cases in which no criminal action was taken.

Although the disposition of most cases (71 percent) is unknown, 29 percent of the cases resulted in a guilty verdict (9 percent of those were for fire violations), one person was found guilty of a nonfire offense, and 11 cases, none of which involved fire, were dismissed.

Violations of Forest Service Fire Regulations (Subpart A, 36 CFR 261.5a-.5f) and Orders (Subpart B, 36 CFR 261.52a-.52k)

Although 18 percent of all reported violations of Forest Service regulations involved illegal fire activities, less than one-fourth (21 percent) of these fire violations resulted in fines. (Persons responsible for the remaining 79 percent of the fire violations were not identified.) One-tenth of the warning notices for violations of Forest Service regulations were issued for fire offenses.

Because the number of reported violations of fire regulations is higher than one would expect, given the amount of law enforcement effort directed at the wildfire problem

- (7.5 percent), I speculate that:
- 1) even though the law enforcement effort is relatively small, it's highly efficient because it is directed at specific problems and targets,
- 2) the wildfire law enforcement effort could be larger than the data indicate,
- 3) the wildfire problem is greater than the enforcement emphasis given, and/or
- 4) law enforcement personnel are more apt to cite and/or report fire violations than other types of infractions.

Three unlawful activities accounted for almost 90 percent of the violations of Forest Service regulations (Subpart A, 36 CFR 261.5a-.5f):

- 1) Leaving a fire without completely extinguishing it (261.5d) (54 percent of the violations).
- 2) Carelessly or negligently throwing or placing any ignited substance or other substance that may cause a fire (261.5a) (17 percent of the violations).
- 3) Burning without a permit (261.5c) (17 percent of the violations).

Two unlawful activities accounted for 80 percent of the violations of Forest Service orders (Subpart B, 36 CFR 261.52a-.52k):

1) Building, maintaining, attending, or using a



fire, campfire, or stove fire (261.52a) (42 percent of the violations).

2) Going into or being on an area temporarily closed to public use (261.52e) (38 percent of the violations).

Because violations of Subpart A and B fire regulations accounted for most of the reported fire offenses, wildfire prevention activities could be targeted at these particular problem areas. This may involve more rigorous preventive patrolling by law enforcement personnel and added efforts to educate the forest-using public about fire hazards and wildfire statutes and regulations.

Violations of Title 18 USC 1855 and 1856

Although 40 percent of the reported Title 18 USC offenses were violations of fire statutes 1855 and 1856, only one person was fined (under 18 USC 1856) for criminal activity. The remaining offenders were not identified.

Violations of State and Local (Non-Federal) Laws

Unlawful fire activities accounted for most (87 percent) of the reported violations of non-Federal laws.

Like the violations of fire regulations discussed above, the number of Federal, State, and local wildfire law violations are higher than one would expect given the amount of law enforcement effort expended. It's possible, therefore,



that the reasons for these higher numbers are similar to those for reported violations of fire regulations.

Although these statistics show that wildfire violations comprise a significant portion of the reported criminal offenses, they do not provide the information necessary to answer an important question: Do Forest Service law enforcement efforts directed at preventing and repressing wildfire offenses reduce human-caused wildfire occurrence? I recast this question in the form of a null hypothesis, and, in order to test this hypothesis, I devised the following study.

1-repair

enece ver

÷ 4 *

CHAPTER X

A QUANTITATIVE ASSESSMENT OF THE RELATIONS BETWEEN LAW ENFORCEMENT AND HUMAN-CAUSED WILDFIRE OCCURRENCE

Methods

Data Collection and Computational Procedures

Before I could test the null hypothesis (law enforcement efforts directed at human-caused wildfire offenses have no relation to wildfire occurrence), it was necessary to develop a data base consisting of the following elements:

- 1. Law enforcement data, ideally covering the broad range of law enforcement activities as I've defined them in Chapter IV.
- 2. Human-caused wildfire occurrence data, including:
 - · Total number of wildfires/year
 - Number of wildfires by cause/year
 - Wildland area protected/year
 - Population density
 - · Weather elements.

This was a first attempt to establish a quantitative relation between law enforcement and wildfire occurrence on a regional basis. Instead of initiating detailed causal studies of law enforcement interactions with other aspects

of the legal system, I examined law enforcement as a system rather than breaking it down into its component parts. I decided to examine the system as a whole, because if, after analysis, no relation between law enforcement and wildfire occurrence was evident, I would have to question the potential success of additional, detailed studies. If, however, a study using macro variables indicated a relationship, then future, detailed cause and effect studies using more refined variables could examine the relations described in Figure 4.1, each of which has a different set of mechanisms and would require a separate analysis. This section describes my efforts to collect and analyze data depicting the overall relations of law enforcement to human-caused wildfire occurrence.

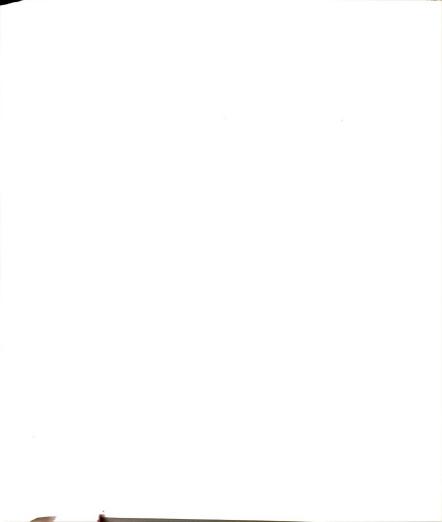
Because Forest Service LEMARS data were incomplete and the 3-year time span was insufficient for an indepth analysis of Forest Service law enforcement efforts, ³⁶ I used State law enforcement data submitted each year to Forest Service Area State and Private Forestry (S&PF) offices. Each S&PF office summarizes these data in a report that includes the annual number of prosecutions, convictions, and settlements obtained for wildfire violations. Although the contents of these reports are limited, they contain the only data that are uniformly reported over a wide geographic area for long time periods.

³⁶ See footnote 35, page 77.



I selected Region 8, the 13 Southeastern States, and Region 9, the 20 North Central and Northeastern States, as my initial sample. These two Forest Service Regions were selected to provide a large sample for analysis and, more importantly, because 85 percent of the human-caused wild-fires in the United States occur in these two Regions (25 percent in the North and 60 percent in the South). Furthermore, their topographic and climatic patterns are relatively similar (Deeming et al. 1977). Because State reporting procedures are generally revised every 10 to 12 years, I selected the 12 most recent years of data, from 1970 through 1981, to ensure homogeneity.

Data for the 12-year period were obtained from three primary sources: the USDA Wildfire Statistics, the 1981 Statistical Abstract of the U.S., and the Climatological Data -- National Summary. For each year and State the Wildfire Statistics supplied the total number of humancaused wildfires, the number of fires by cause, and the total area protected. (The latter data were used to normalize the number of fires for each State.) I obtained population density information (expressed as the number of people/square mile) from the Statistical Abstract, anticipating that the population density would be related to a State's fire occurrence figures. Finally, in order to determine the relations between law enforcement efforts and human-caused wildfire occurrence, it was necessary to account for the influence of weather on fire incidence. Τo

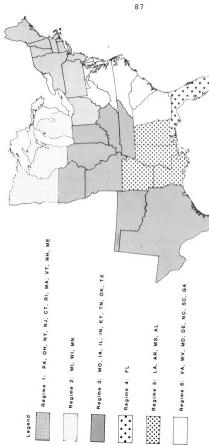


accomplish this, I extracted monthly rainfall data for each State, expressed as departures from normal precipitation, from the Climatological Data and then calculated an annual weather correction factor for each State's fire occurrence data.

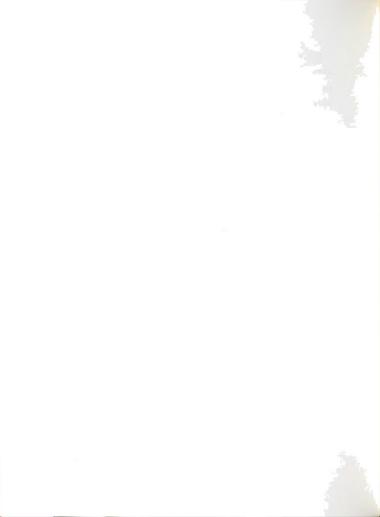
Although relative humidity has a greater effect on fire ignitions than precipitation (fine fuels respond more quickly to relative humidity), relative humidity data are not operationally summarized on a statewide basis but rather by individual stations. Trying to summarize and analyze these data statewide, much less on a regional basis, would require a separate, major study. Even though the relationship of precipitation to daily fire occurrence is weaker than that of relative humidity, Haines and Main (1978) have shown that it is still significant, especially during periods of drought. Moreover, of all the weather elements that have a direct bearing on fire activity, statewide precipitation data are the most readily available. I chose to examine departures from normal precipitation to determine if abnormal precipitation conditions either increase or decrease fire occurrence. (Other precipitation parameters such as frequency and duration are not summarized on a regional basis, and precipitation amounts, by themselves, are poorer indicators of fire occurrence than departures from normal.)

Computation of the Weather Correction Factor (WCF). In order to assess the impact of precipitation departures from normal (DFN) on wildfire occurrence, I determined both the fire seasons and fire occurrence DFN for each State, anticipating that the effects of precipitation on fire ignitions would vary with the time of year. By relating the precipitation DFN to the fire occurrence DFN during periods of high, medium, and low fire occurrence, I developed annual weather correction factors that were used to adjust each State's fire occurrence data. This section describes the process used to compute the weather correction factors.

After consulting with a number of State fire management personnel and examining peak fire activity seasons, seasonal vegetative stages, and precipitation amounts, (Haines et al. 1975, National Oceanic and Atmospheric Administration 1968), I grouped the 33 States into six homogeneous fire-climate regimes (Fig. 10.1). Although silviculturally Oklahoma and Texas are similar to States in Regime 5, from a fire-climate standpoint, they are dissimilar. Because their fire seasons, NFDRS climate class (Deeming et al. 1977), and precipitation distribution and amounts correspond more closely to those in Regime 3, they were grouped with those States. I then selected a representative State from each regime (Pennsylvania, Michigan, Missouri, Florida Louisiana, Virginia) to determine the weather correction factor (WCF) for all States in that regime.



regime have comparable peak fire-activity seasons, seasonal vegetative Six fire-climate regimes in the Eastern United States. States Figure 10.1. within each stages, and



I obtained monthly fire occurrence data from 1970 through 1981 for each of the six representative States and calculated the average number and percent of annual wildfires/million acres protected (MAP) for each month. Based on these data and each regime's fire season, I grouped months into classes of high fire occurrence (>10 percent of the annual fires), medium fire occurrence (5-10 percent of the annual fires), and low fire occurrence (<5 percent of the annual fires) (Fig. 10.2). For example, those States in Regime 1, represented by Pennsylvania, can expect high fire occurrence in March, April, and May, medium occurrence in October and November, and low occurrence during the remaining months.

Next, I normalized each of the six representative
State's monthly fire occurrence data for the 12-year period
to determine the monthly fire occurrence DFN and then
stratified the months of high fire occurrence for all six
States into one data set, the months of medium fire
occurrence into a second data set, and the months of low
fire occurrence into a third data set. These data,
expressed as percentages, were plotted against precipitation
DFN for each month to determine the relations between the
two variables (Fig. 10.3).

Although these data were fit to seven different mathematical models (linear, power, exponential, logarithmic,

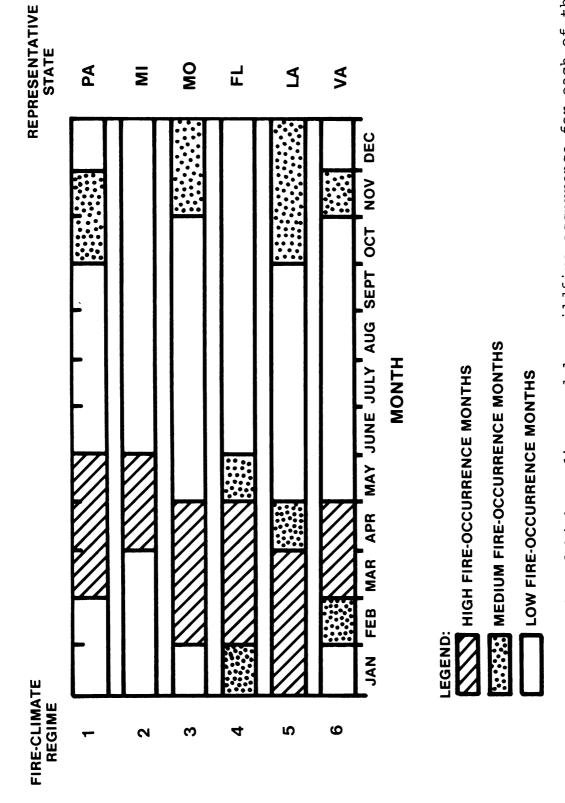
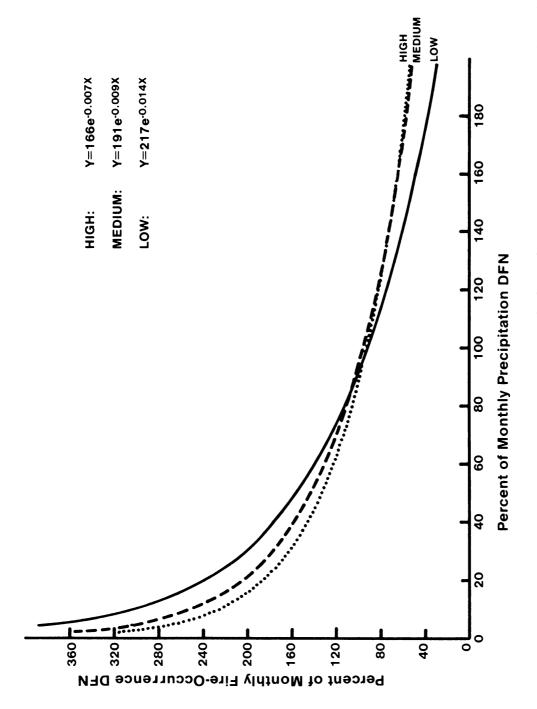
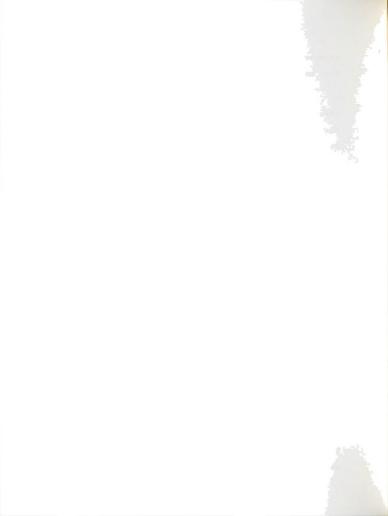


Figure 10.2. Months of high, medium, and low wildfire occurrence for each of the six fire-climate regimes.





Relations between monthly precipitation DFN and monthly wildfire periods of high, medium, and low fire incidence. Figure 10.3. occurrence DFN for



hyperbolic, reciprocal linear, and parabolic), the exponential model:

$$Y = Ae^{B \cdot X}$$

gave the best fit for all three levels of fire occurrence; the r²'s for all three curves in Figure 10.3 were approximately 0.15. (The F-test showed this to be significant at the 0.05 level.) The three curves depict what one might expect in nature, i.e., normal or above normal precipitation exceeding some lower bound has less impact on fire occurrence than below normal precipitation (Haines and Main 1978).

For each State and year, I calculated 12 monthly WCF's and then a weighted average annual WCF. To calculate the monthly WCF, I took the percent of monthly precipitation DFN over the 12-year period for each of the 33 States and, knowing the months of high, medium, and low fire occurrence for each State (based on its fire-climate regime), determined the expected percent-of-normal fires for each month and each State from the Y-axis in Figure 10.3. These monthly data were weighted by multiplying them by the percent of expected wildfires/MAP for each month to give a monthly WCF. (The percent of expected number of fires/MAP for each month was calculated for each of the six representative States. The monthly fire occurrence DFN for the States in a particular climate regime were then multiplied by the representative State's expected number of fires/MAP.) I added the

monthly WCF's together by State for each of the 12 years and calculated a mean annual WCF. This factor was used in the remainder of the study to adjust each State's annual fire occurrence data for the influence of weather. For example, if a State reported 8,000 human-caused fires in one year and the year was dryer than normal (e.g., WCF = 0.94), I assumed that the State experienced 480 more fires than the 7,250 (8,000 x 0.94) it would have expected had the precipitation been normal. If during the following year the State had 6,000 fires and the year was wetter than normal (e.g., WCF = 1.07), I assumed that it experienced 420 less fires than the 6,420 (6,000 x 1.07) it would have expected in a normal precipitation year.

With the addition of the WCF's, the data base was complete and ready for editing. I corrected noticeable errors in the data and, when possible, obtained missing data from the appropriate State agencies. Because six of the thirty-three States (DE, IN, VT, CT, IL, IA) either had too few fires or insufficient law enforcement data to include in the analysis, I excluded them from the data base.

Statistical Procedures

I used regression analysis to estimate the relations between human-caused wildfire occurrence and State law enforcement (legal) efforts. This initially involved selecting, fitting, and testing a mathematical model which described the relations between the X and Y variables.



The X and Y Variables. The dependent variable Y is the annual number of human-caused wildfires for each of the 27 States corrected for weather and normalized by million acres protected. The independent variable X is the amount of legal effort expended by each State to control wildfire violations.

One might use a number of variables to represent State legal efforts, such as work-hours devoted to enforcing wildfire laws, the number of violations and warning notices issued for wildfire offenses, or the type and amount of penalties imposed for wildfire violations. Assembling the data on a State-by-State basis, however, would have required an unacceptable expenditure of time and effort for an initial study. It was, therefore, cost effective to use readily available and quantifiable State data on the annual number of prosecutions, convictions, and settlements for wildfire violations. Although these law enforcement activities represent only a portion of State legal efforts, they may well have a greater impact on wildfire occurrence than other enforcement activities. For example, the penalties for wildfire violations, upon conviction, are usually more severe; some of the cases receive wide, mass-media publicity; and prosecutions, convictions, and settlements may provide a greater deterrent to offenders than violation or warning notices.

I tested seven different combinations of prosecutions [P], convictions [C], and settlements [S] to see which

correlated best with the total number of human-caused wild-fires. Because the expression:

$$X = P + C + S$$
 10.2

had the highest r^2 (0.04) relative to fire occurrence, it was selected as the best measure of legal effort.³⁷

The Model. In the initial plot of the X and Y data, the points were clustered in the lower left quadrant of the scattergram (Fig. 10.4). Because the data were not normally distributed and they indicated a strong curvilinear relationship, I chose to transform both variables rather than fit a complicated nonlinear regression to points plotted on an arithmetic scale. I chose a logarithmic transformation of both the X and Y variables, because a transformation of both variables applies "where the ratio between increments in structures of different size remains roughly constant, yielding a relatively great increase of one variable [in this case, number of wildfires] with respect to the other [legal effort] on a linear scale" (Sokal and Rohlf 1969).

Although a transformation can affect the validity of the conditions needed for valid inferences from the computations, if a transformation helps with one condition, it will often help with others (Ryan et al. 1976). For example, as

 $^{37 \, \}mathrm{For}$ computational purposes, the sum expressed by 10.2 was increased by 1.0 to preclude taking the logarithm of zero.

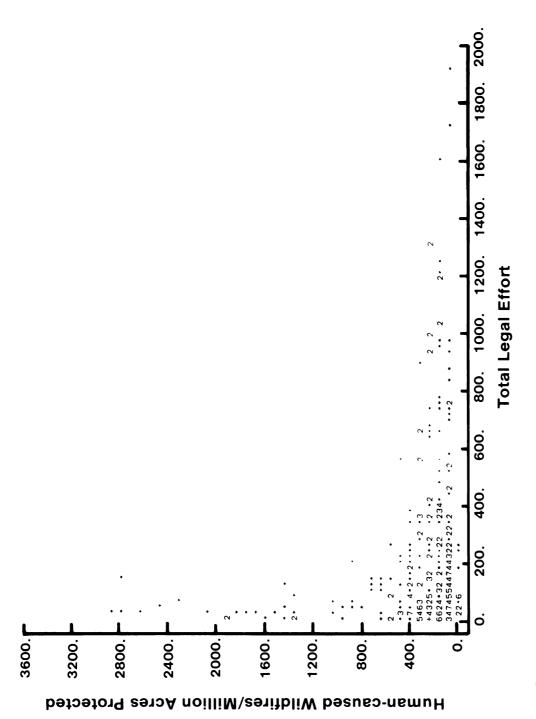
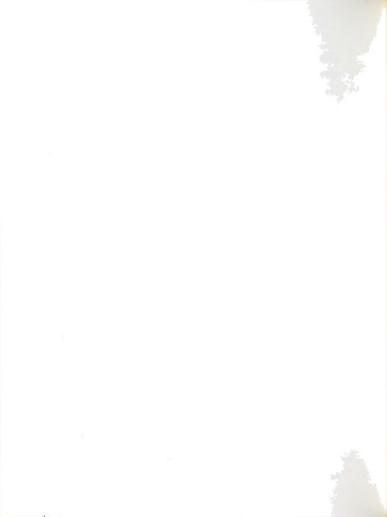


Figure 10.4. Relations between legal effort and human-caused wildfire occurrence. (Note: If more than one point falls on the same plotting position, a count of the number of points is given. The + symbol indicates more than nine points on the same plotting position.)



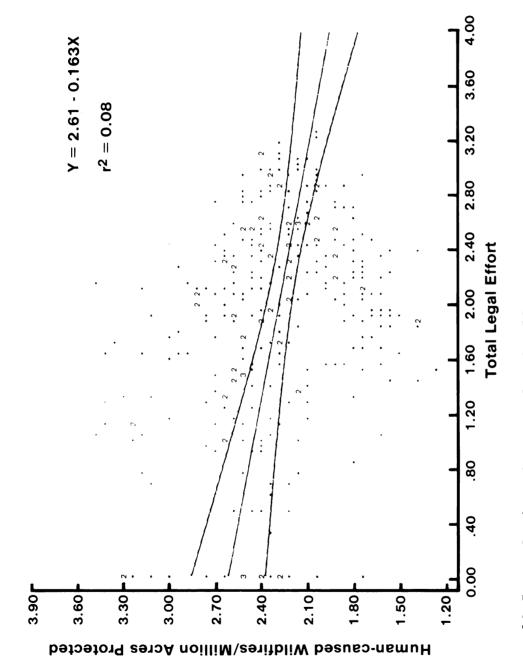
a by-product of such a transformation, the proportion of the variance of Y explained by X generally increases and the distribution of the deviations of points around the regression line tends to become normal and homoscedastic (Sokal and Rohlf 1969). That is precisely what occurred when the data plotted in Figure 10.4 were transformed using the model:

$$\log \hat{Y} = \log a + b \log X. \qquad 10.3$$

Even though the relationship in Figure 10.4 appeared curvilinear, for illustrative purposes, I fit a linear model to the untransformed data. This produced an r^2 of 0.04. After transformation, computations produced an r^2 of 0.08 (Fig. 10.5). Along with the increase in the r^2 , a comparison of the residuals for the untransformed and the transformed data showed a definite improvement (Fig. 10.6, Fig. 10.7). An examination of the confidence limits about the slope of the regression line in Figure 10.5 (significant at the 0.001 level) and of the residuals following the logarithmic transformation in Figure 10.7 indicated that the model provided a good estimate of the true line of regression.

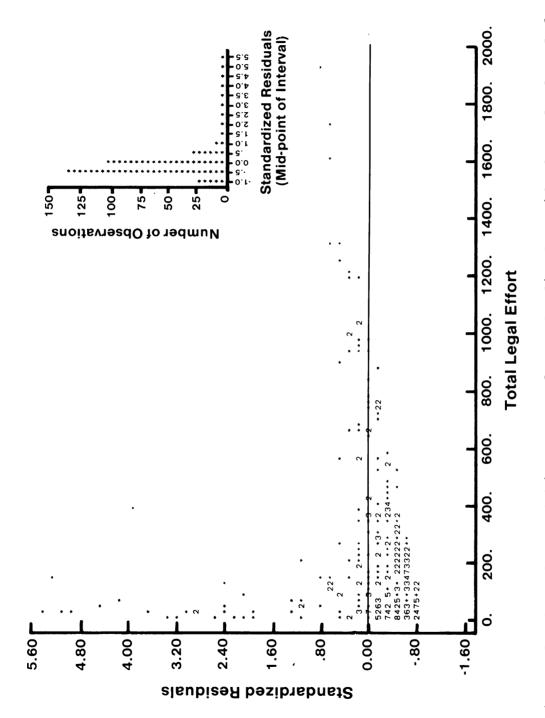
³⁸According to Ryan et al. (1976), when a model is fit to a set of data, the residuals (the differences between observed data and values predicted by the equation) should always be examined because one never knows with certainty that the right model has been used. Residuals indicate how well a model fits the data. When a poor model has been used, a plot or histogram of the standardized residuals shows a pronounced pattern indicating a bad fit, e.g., Figure 10.6. On the other hand, Figure 10.7 indicated that the standardized residuals from the logarithmic transformation approached a normal distribution and equal variance.



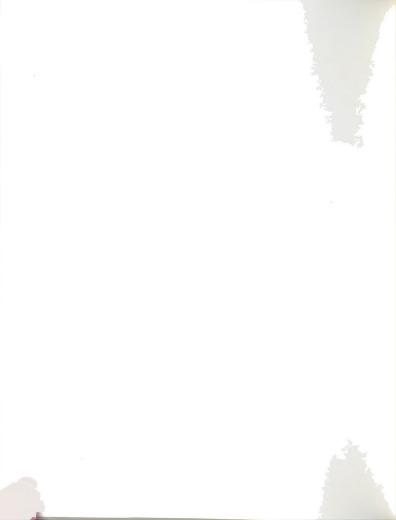


Confidence limits are plotted at the 0.001 Relations between legal effort and human-caused wildfire occurto a logarithmic scale. Confidence limits are plotted at the 0. Figure 10.5. rence, transformed significance level.





Plot and histogram of standardized residuals calculated from a linfit to the untransformed data in Figure 10.4. Figure 10.6. model that was



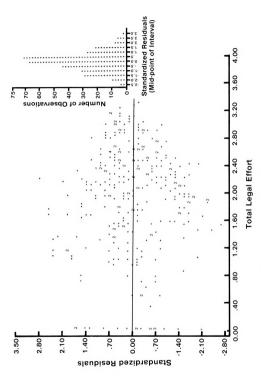


Figure 10.7. Plot and histogram of standardized residuals calculated from a linear model that was fit to the transformed data in Figure 10.5.



Testing the Hypothesis. There are three equivalent ways of testing the null hypothesis that the regressor X has no effect on Y: the F-test and the t-test of $\beta=0$ and the test of $\rho=0$ (Wonnacott and Wonnacott 1977). Because there is little difference between the F-test and the t-test (the t-statistic is related to F by $t^2=F$), I selected the simpler t-test to determine the significance of the regression coefficient.

The t-ratio can also be used to set the confidence limits to b, another method of testing a hypothesized value of the coefficient. If the confidence limits do not include zero as a possible value, the hypothesis that $\beta=0$ is rejected. Although this is the same result given by the t-test, the confidence limit approach may yield more information than the t-test. As a result, I used both the t-test and the confidence limits of the regression coefficient to test the null hypothesis, $\beta=0$.

Results

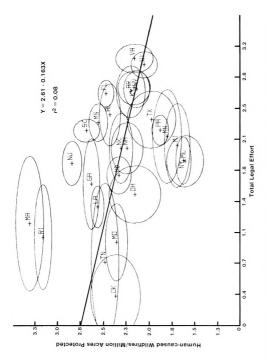
Although the regression line in Figure 10.5 suggested that fire occurrence varied inversely with legal effort $(r^2=0.08)$, the intensity of association between these variables could have occurred by chance alone; due to a poor sample, the data could indicate a relationship when, in fact, there is none $(\beta=0)$. The calculated t-value (highly significant at the 0.001 level) and the 95 percent confidence limits of the regression coefficient



 $(-0.104 \le \beta \le -0.222)$ both suggest, however, that β is not zero. This implies that increasing State legal efforts against wildfire violations decreases State wildfire occurrence.

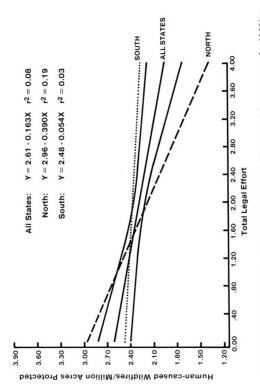
Based on these results, I extended the analysis by identifying the position of each State about the regression line (Fig. 10.8). (The ellipses enclose the data points for each State out to one standard deviation; the + sign indicates the arithmetic mean.) An interesting pattern emerged. Most of the Southern States lie above the regression line and most of the Northern States below the line. (The Southern States include GA, LA, TN, OK, MO, SC, MS, AL, FL, NC, AR, TX, KY, WV, VA; the Northern States include MA, RI, NJ, MD, NH, WI, OH, PA, MN, MI, NY, ME.) An analysis of the North-South residuals for the 27 States indicates that the Northern and the Southern States are significantly different from each other (P < 0.05). Taking this a step further, I conducted separate regression analyses of the Southern and Northern States and compared the results of both analyses with those calculated for all States. The slopes for both the Northern and Southern States were significant (P < 0.05), and they both fell outside the confidence limits of the regression coefficient for all States (Fig. 10.9). This indicates that the North-South data sets are significantly different from each other and from the 27-State population; therefore, they should be treated separately.



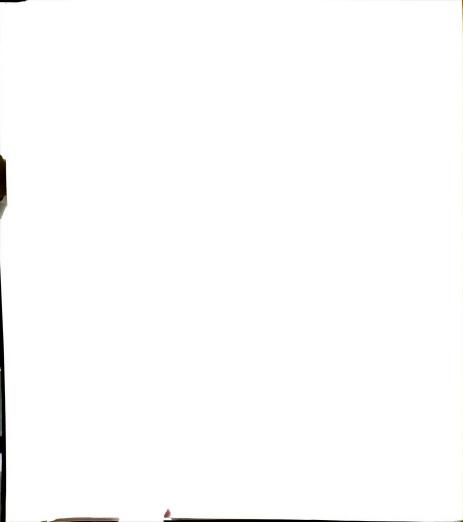


Location of the 27 States relative to the regression line. Figure 10.8.





Confidence Relations between State legal efforts and human-caused wildfire States, the Northern States, and the Southern States. at the 0.001 significance level. Figure 10.9. occurrence for all limits are plotted

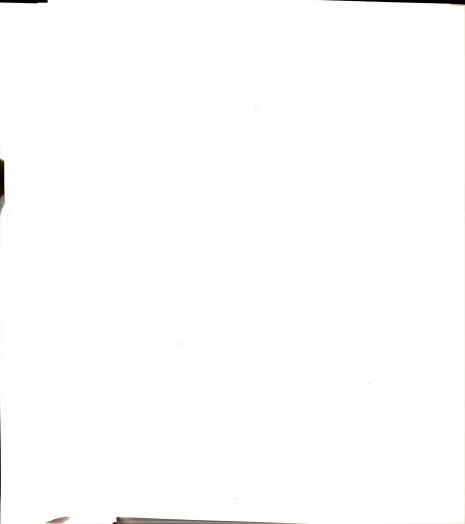


Before continuing the analysis of the Northern and Southern States, I plotted the standardized residuals for each of the 27 States by year, and, using the F-test, found no significant difference (P < 0.05) between years. This indicates that there were no significant trends in the data during the sample period and, therefore, the results are not biased by a specific time span.

Figure 10.8 indicates that law enforcement effort and wildfire occurrence vary considerably from State to State. An F-test of the standardized residuals for each State confirms this; the differences among States are highly significant (P < 0.001). Population density did not contribute in any significant way to this variation. I expected that, as the population per square mile increased, the number of wildfires would increase correspondingly, given the same amount of legal effort. A regression analysis of population density and wildfire occurrence, however, showed no significant relationship (P < 0.05) between the two variables.

Incendiarism is the leading cause of wildfires in the Eastern half of the United States, followed by debris burning. These causes combined account for more than half of the wildfires in Region 9 and three-fourths of the wildfires in Region 8 (USDA Forest Service 1970-1981). As a result, I determined the significance of State legal efforts on incendiary and debris-burning wildfires.

Because the analysis showed that there were no significant relationships between legal efforts and other wildfire

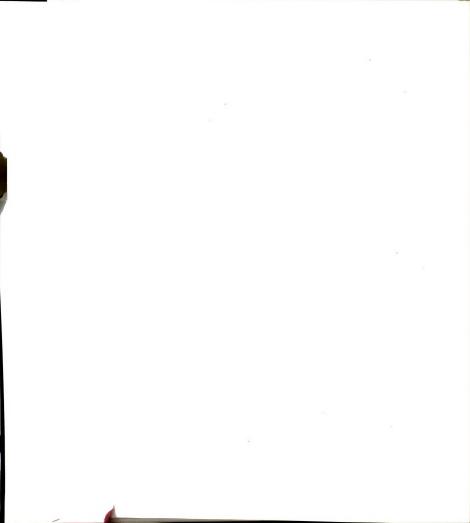


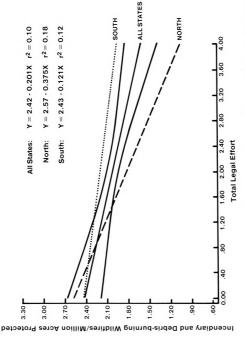
causes (e.g., equipment use, railroads, campfires), most of the enforcement effectiveness seems to be associated with incendiary and debris-burning fires. This is supported by an increase in the r^2 's from 0.08 to 0.10 when only these two fire causes are analyzed (Fig. 10.5, Fig. 10.10).

The slopes of the regression lines for the Northern and Southern States, both significant at the 0.001 level, indicate that State legal efforts have a greater impact on combined incendiary and debris-burning fires in the Northern States ($r^2 = 0.18$) than in the Southern States ($r^2 = 0.12$). This same relationship holds for incendiary and debrisburning fires when they are analyzed separately (Fig. 10.11, Fig. 10.12). Based on the slopes of the individual regression lines (all significant at the 0.05 level), legal efforts in both the North and the South appear to have a greater impact on incendiary fires than on debris-burning fires.

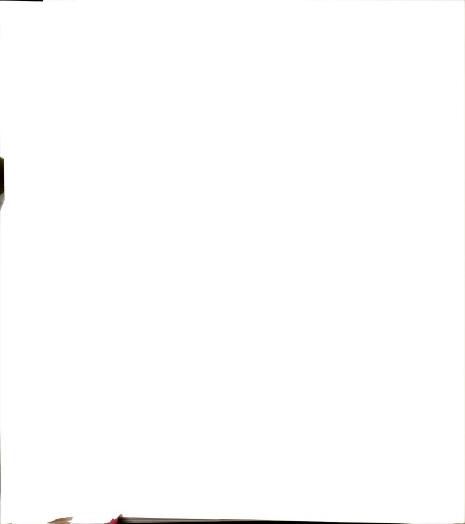
Discussion

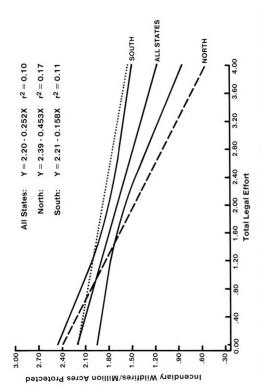
For a realistic assessment of fire prevention achievements, any analysis of prevention activities and their impact on human-caused wildfires must take into account the effects of weather. The weather correction factor (WCF), which reduced the variability in wildfire occurrence by 7 percent, is just one way of integrating the weather into an analysis of fire prevention activities. While this method and its results may be satisfactory for some managers,





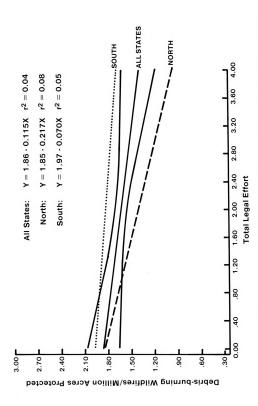
Confidence Figure 10.10. Relations between State legal efforts and incendiary/debris-burning wildfires for all States, the Northern States, and the Southern States. Confident limits are plotted at the 0.001 significance level.



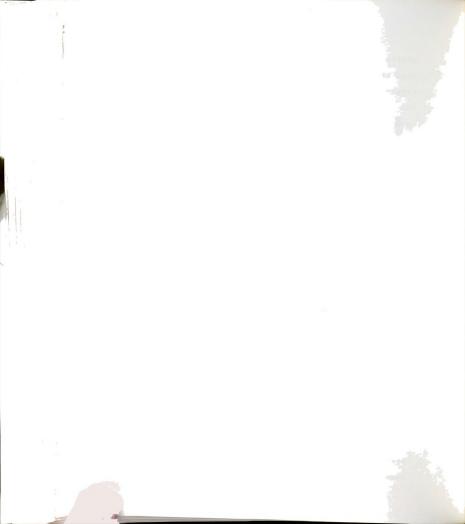


Confidence limits are Figure 10.11. Relations between State legal efforts and incendiary wildfires for all States, the Northern States; and the Southern States. Confidence limits ar plotted at the 0.001 significance level.





fires for all States, the Northern States, and the Southern States. Confidence limits Figure 10.12. Relations between State legal efforts and debris-burning wildare plotted at the 0.001 significance level.



others may want to take a different approach, perhaps one that explains more of the variance in fire occurrence. This requires, however, balancing efforts to refine a WCF with the time and expense necessary to collect, process, and analyze more detailed weather data.

Once the fire occurrence data in this study were corrected for the effects of weather, the analysis indicated that State law enforcement activities have an impact on human-caused wildfire occurrence: As legal efforts increased, the number of wildfires decreased. Although the correlations were low, this may be due to the nature of the analysis. Prosecutions, convictions, and settlements, used as a measure of State legal effort in this study, though important, represent only a portion of the total law enforcement effort directed at wildfire offenses. Presumably additional measures of law enforcement that encompass prevention and other repression activities discussed in Chapters IV and VII would also show a stronger relationship between law enforcement activities of fire management organizations and changes in wildfire occurrence.

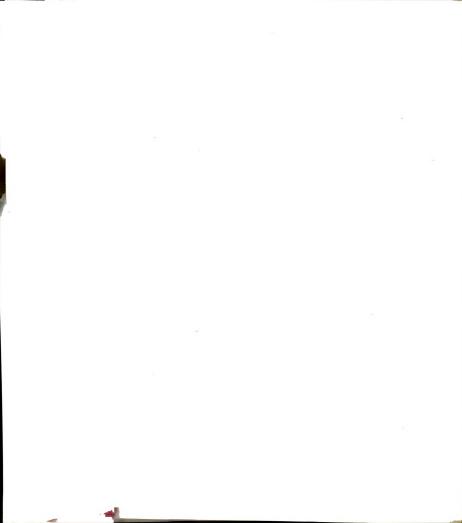
The analysis also indicated that not only were the Northern and Southern groups of States significantly different from one another, but also that a unit of law enforcement effort in the Northern States was more effective in reducing fire occurrence than an equal unit of effort in the Southern States. These relationships are even more pronounced if we restrict wildfires to two causes: incendiarism

and debris burning. These North-South differences may be due partially to data from Massachusetts and Rhode Island, two Northern States that experience an unusually high number of fires per million acres protected. Their data increased the slopes of the regression lines for the Northern States.

Some of the differences, however, may be cultural. For over 200 years, it has been an accepted practice in the South to burn wildlands intentionally in order to rid the forests of pests, improve grazing, or demonstrate dissatisfaction with land management policies and procedures. As a result, aggressive enforcement of wildfire laws has often been viewed as interference with one's "right to burn," and government attorneys and State courts have been reluctant to prosecute and convict people accused of setting fires not considered a serious threat to life and property.

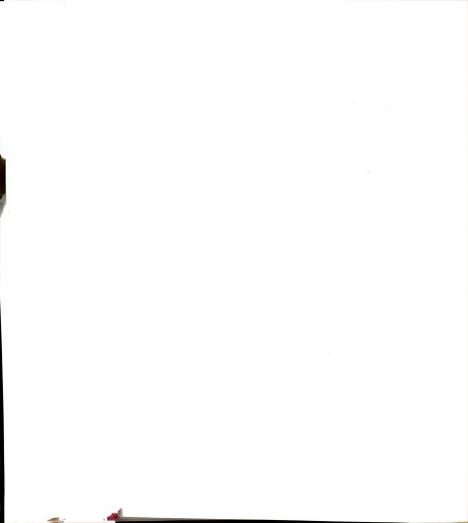
Most Northerners have a different perspective. Although, historically, they had intentionally set fires to remove logging debris and to clear land for farming, these fires occasionally resulted in enormous destruction of forest resources and substantial loss of human life. Perhaps a respect for fire, grown out of past, disastrous experiences, is responsible for the less tolerant Northern attitudes toward deliberately set fires. In any case, enforcement activities against such fires appear more effective in the Northern than in the Southern States.

Another possible reason for these differences may be the relative lengths of the fire seasons in the Northern and



Southern States. Because the seasons are generally shorter in the North, law enforcement efforts directed at wildfire violations may be more concentrated and intense during the few months of peak fire activity. In the South, however, the fire seasons are generally longer, resulting in more diffused enforcement activities. Consequently, a unit of law enforcement could be more effective in the North than in the South.

Some fire managers believe that strong law enforcement will increase rather than decrease human-caused wildfires, especially incendiary fires set in retaliation against governmental authority. The data in this study suggest that this is not generally the case; legal efforts in both the North and the South reduce the occurrence of incendiary fires more than they reduce debris-burning fires. noteworthy, because the nature of incendiary crimes reduces the chances of successful law enforcement. Delayed ignition devices, for example, allow ample time for an incendiarist to escape detection; evidence is often consumed by the fire; few, if any, witnesses observe the crime; and the fires are frequently set at times and in places outside routine police patrol routes and schedules. The results from this study suggest, however, that concerted law enforcement efforts by State and local officers to apprehend, prosecute, and convict incendiarists reduce incendiary wildfire occurrence.



The relationship between legal efforts and debris-burning fires is not as strong. People generally do not regulate their debris-burning activities out of fear of punishment by law enforcement authorities. Most people believe that they are burning debris within the limits of the law and probably expect that their fires will not escape and damage wildlands. As a result, repressive law enforcement activities against people responsible for escaped debris-burning fires have less impact on the debris-burning population.

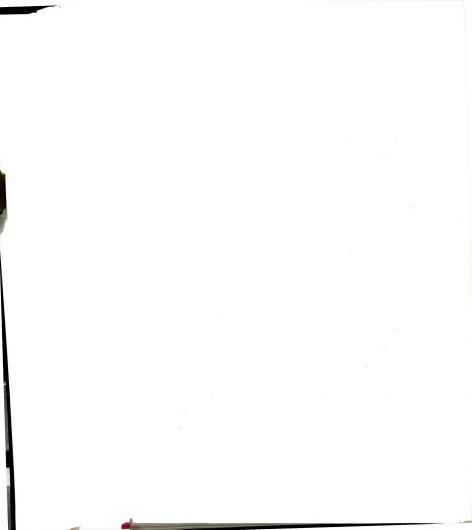
In closing, the results of this feasibility study are limited, in that they demonstrate statistical relations between variables rather than cause and effect. Also, this is a regional study and, therefore, the results may not be applicable to small land management units. Additional research is needed to support or refute the major hypothesis and results determined in this study and to verify causality. Finally, this study does not answer the question asked in Chapter IX: Do Forest Service law enforcement efforts directed at preventing and repressing wildfire offenses reduce human-caused wildfire occurrence? The results do indicate, however, that statistically, increasing State law enforcement efforts is associated with decreasing wildfire occurrence. One can reasonably speculate that the same relationship holds true for the Forest Service, but, until suitable law enforcement data are collected and analyzed by the Agency, the impact of its law enforcement efforts on human-caused wildfire occurrence will remain unknown.

CHAPTER XI

SUMMARY AND CONCLUSIONS

The American public incurs enormous costs and sustains extensive losses of valuable wildland resources each year because of human-caused wildfires. Even though land management agencies such as the U.S. Forest Service have instituted and maintained public information and education programs to reduce the incidence of these wildfires, their programs have been only partially successful. Using the American legal system to prevent and control fire-setting activities is one way of supplementing these education programs and enhancing fire prevention success. Although the legal system can exert a powerful influence on human behavior, the benefits of using it will not be fully realized until land managers understand the purpose of the system, know how it functions, and learn what it can accomplish.

To facilitate this understanding, this dissertation describes the American legal system, defining and characterizing major components and interactions of the system, and discusses the relations and interactions of the U.S. Forest Service with the legal system components and processes.



The four components of the system--legislative groups, legislated laws, enforcement agencies, and courts--together formalize standards of behavior for society. Legislative groups at Federal, State, and local levels formulate and enact laws consisting of statutes, ordinances, and regulations. Although unlegislated laws (e.g., common law and equity) are an integral and important part of American law, legislated laws are most important to fire management organizations.

Congressional statutes affecting the U.S. Forest Service and its activities are found in the United States Code. The Code contains two important wildfire acts--18 USC 1855 and 1856--that delineate criminal wildfire offenses and their punishments. These acts, in addition to the fire regulations and orders in the Code of Federal Regulations, are those enforced by the Forest Service in its attempt to prevent and control wildfire offenses.

Because laws, by themselves, may not ensure law-abiding behavior, enforcement is often necessary to make them both meaningful and effective. Acting under the authority of law, enforcement personnel conduct public service, prevention, and repression activities designed to protect life and property, preserve peace, and promote individual freedom. These personnel function in a wide variety of generalist and specialist positions in government attorney offices, police departments, and corrections agencies.

Congress has authorized and prescribed the law enforcement duties of the Forest Service in a number of statutes. These duties, mainly involving prevention and repression activities, are conducted primarily by Forest Service Special Agents, Law Enforcement Officers, and Forest Officers. Federal law enforcement agencies such as the OGC, FBI, and U.S. Marshals Service assist these Forest Service law enforcement personnel.

The primary purpose of the courts, the fourth component of the American legal system, is to administer justice, that is, settle disputes, interpret and apply the law, provide checks and balances, and administer judicial proceedings. Courts in the United States exist in a dual system, Federal and State. The Federal court system consists primarily of the Supreme Court, the 12 U.S. Courts of Appeals, and the 95 U.S. District and Territorial Courts. The State system is composed of a State Supreme Court, intermediate appellate courts, major trial courts, and minor trial courts.

Violations of Federal statutes and Forest Service regulations are prosecuted in Federal District Courts and, depending on the nature and seriousness of the case, tried either by a U.S. Magistrate or a U.S. District Court judge. Both the Magistrates and the judges issue search and arrest warrants, subpoenas, and summonses to Forest Service law enforcement personnel authorized to administer them.



The interactions of the four legal system components with people entering the system for an alleged violation of civil or criminal law are described in the civil and criminal process sections of this paper. The civil process allows a person with a claim against another to institute a lawsuit and seek a remedy (generally money damages, an injunction, or a specific performance of contract) for a violation of personal or property rights (tort or breach of contract). Assisted by the OGC and U.S. Attorneys, the Forest Service attempts to settle claims before they reach court by using the demand-for-payment process.

The criminal process, a system that deals with criminal cases, begins with a detected and reported crime (felony or misdemeanor) and concludes with the unconditional release of a law violator. Forest Service involvement in the process is limited primarily to detecting and reporting criminal offenses; investigating crimes; identifying and, if necessary, arresting suspects; issuing violation notices; serving summonses; and filing complaints.

Although the Forest Service interacts in varying degrees with all of the American legal system components, most of its activities are concentrated in law enforcement. Law enforcement has a unique history in the Agency, one that's been marked by fluctuations in enforcement emphasis and

J .			

policy. Plagued with rising crime rates, the Service is confronted with a number of problems such as management constraints on enforcement activities and inconsistent use of law enforcement responsibility and authority. According to the GAO, these problems can be reduced by increasing the emphasis on enforcement and removing management constraints, clarifying the field offices' role in law enforcement, revising existing regulations, and increasing law enforcement efforts devoted to preventing and controlling criminal activities.

Wildfires receive significantly less law enforcement emphasis in the Forest Service (approximately 8 percent of the Agency's effort) than forest recreation, an emphasis that will probably remain unchanged in upcoming years. Although Forest Service law enforcement statistics show that wildfire violations comprise a significant portion of the reported criminal offenses, they do not indicate whether the Agency's law enforcement efforts reduce human-caused wildfire occurrence.

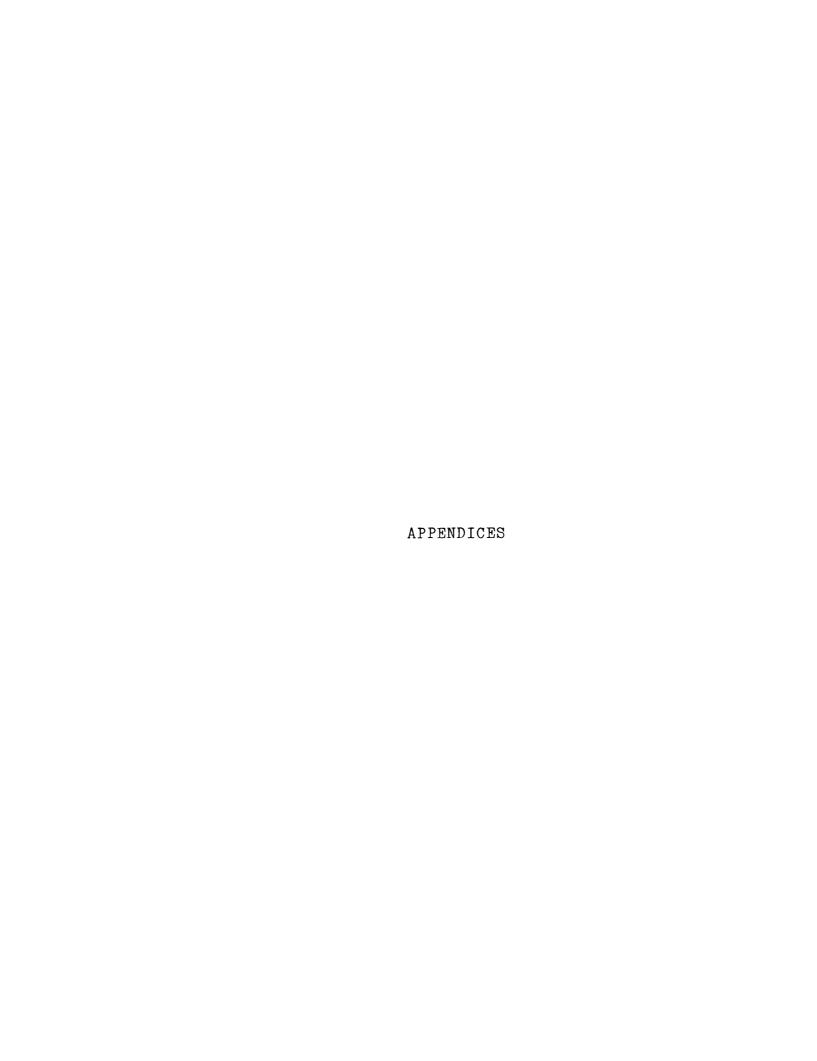
Due to insufficient Forest Service data, a quantitative assessment of the relations between law enforcement and human-caused wildfires was conducted using data from 27 States in Forest Service Regions 8 and 9. After computing an annual weather correction factor based on precipitation departures from normal, the State fire occurrence data were

adjusted for the effects of weather. Regression analyses were then used to express the annual number of human-caused wildfires, corrected for weather and normalized by million acres protected, as a function of State legal efforts, expressed as the sum of annual wildfire prosecutions, convictions, and settlements.

The results of these analyses indicate that increasing State legal efforts against wildfire violations decreases State wildfire occurrence and that law enforcement efforts of the Northern and Southern States are significantly different from one another. The analyses also suggest that legal efforts have a greater impact on incendiary and debris-burning fires than on all fire causes, and they have a greater impact on combined incendiary and debris-burning fires in the North than in the South. Law enforcement in both regions affects incendiary more than debris-burning fire occurrence.

These results, though applicable to State fire management organizations, may reflect Forest Service legal efforts as well. Until suitable law enforcement data are collected and analyzed by the Forest Service, however, the impact of its law enforcement efforts on human-caused wildfire occurrence will remain unknown. Even so, the Agency will continue to direct at least part of its law enforcement effort toward the prevention and control of wildfire offenses on the National Forests.

Forest Service law enforcement should play an important role in wildfire prevention. Its role, however, will probably never be as large as that of prevention education. In fact, in comparison to public information and education efforts currently directed at wildland users, it seems relatively small. And yet, if used wisely and efficiently as a complement to other prevention efforts (e.g., education, engineering, hazard reduction), Forest Service law enforcement, as part of the American legal system, can have potentially significant impacts on wildland fire prevention effectiveness.





APPENDIX A

STATUTES, REGULATIONS, ORDERS, AND NOTICES



APPENDIX A

STATUTES, REGULATIONS, ORDERS, AND NOTICES

- I.--The United States Code, the United States Statutes at Large, and the United States Code Annotated.
- A. United States Code (USC). The Code contains
 Congressional laws and amendments arranged by chapters,
 subchapters, sections, and subsections. In addition,
 historical and explanatory notes often accompany the text.
 The Code is completely revised and reprinted every 6 years,
 although intervening supplements are issued annually. One
 advantage of the Code is that all information on a particular subject is found in one place, including cross references to related material. For example, most of the laws
 affecting the National Forest System are found in Title 16,
 Conservation; most criminal laws are in Title 18. Because
 not all Federal statutes are codified, a person may still
 have to consult the Statutes at Large.
- B. United States Statutes at Large. The Statutes at Large contain the complete text of Federal statutes arranged in chronological order of signing or approval. They are published every 2 years, at the conclusion of each Congress.

C. United States Code Annotated. The Annotated Code updates the USC before the annual supplements are published by the Government Printing Office. It is published quarterly by a commercial firm.

Those wishing to examine specific laws can find these publications in legal offices and large libraries. Also, the Legislative Affairs Staff in the Forest Service Washington Office will locate laws and citations on request.

II .-- Forest Service Regulations, Orders, and Notices.

A. Regulations. A large number of regulations are formulated by administrative agencies (actually by executive department heads) to control activities of the general public. The USDA's Assistant Secretary for Natural Resources and Environment approves and issues Federal regulations affecting Forest Service programs, (although the Forest Service initially drafts the regulations for the Assistant Secretary). Forest Service regulations (1) apply to the general public (as distinguished from specific individuals or organizations); (2) specify behavior that can result in penalties enforceable in the courts; and (3) either in whole or in part, implement, interpret, or prescribe law or policy. Forest Service regulations are in the Code of Federal Regulations (CFR). (See Appendix AIII.)

- B. Federal regulations also give guidelines for issuing "orders"—temporary restrictions on public activities issued by designated authorities within an agency—that have the force and effect of law. For instance, Subpart B, 36 CFR 261.50 (entitled "Prohibitions in Areas Designated by Order") authorizes Regional Foresters and Forest Supervisors to issue orders imposing regulations issued by the Secretary, which close or restrict the use of a forest or a forest development, road, or trail. Fire orders 36 CFR 261.52 include regulations that prohibit such activities as smoking or welding in a specific area for a specified period. Copies of orders must be posted in relevant offices and displayed in other locations to bring the prohibitions to public attention.
- C. Notices. Notices are statements of general policy or interpretations of statutes concerning National Forest administration. Notices are published in the <u>Federal</u> Register but are not codified.

III. -- Procedures for Formulating Federal Regulations

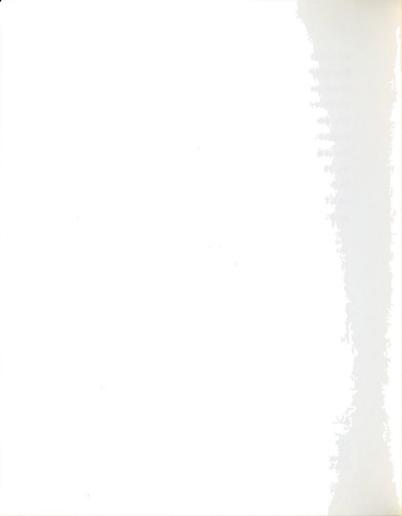
Because a regulation or rule enacted by an agency may seriously affect many people, Congress created the Federal Administrative Procedure Act (APA) in 1946. The APA prescribes, in part, agency rule-making procedure. First, in order to receive public comment during a given time

period, an agency regulation must appear in the Federal Register, which is published daily. Next, interested organizations, corporations, or individuals can express their views about a regulation to the agency responsible for its content; they can demonstrate, for instance, that a regulation is unconstitutional or beyond the authority of the agency. The agency then considers suggestions submitted to it and adopts a final regulation. After it is adopted, the regulation is published again in the Federal Register. All Federal agencies' rules and regulations are codified and published yearly in the Code of Federal Regulations.

³⁹ If you wish to review specific Forest Service regulations, see Forest Service Manual 1023.4. To purchase copies of individual CFR titles, write Superintendent of Public Documents, U.S. Government Printing Office, Washington, D.C. 20402.

APPENDIX B

FEDERAL WILDFIRE PROTECTION ACTS



APPENDIX B

FEDERAL WILDFIRE PROTECTION ACTS

18 USC, Section 1855. Timber Set Afire

Whoever, willfully and without authority, sets on fire any timber, underbrush, or grass or other inflammable material upon the public domain or upon any lands owned or leased by or under the partial, concurrent, or exclusive jurisdiction of the United States, or under contract for purchase or for the acquisition of which condemnation proceedings have been instituted, or upon any Indian reservation or lands belonging to or occupied by any tribe or group of Indians under authority of the United States, or upon any Indian allotment while the title for the same shall be held in trust by the Government, or while the same shall remain inalienable by the allottee without the consent of the United States, shall be fined not more than \$5,000 or imprisoned not more than five years, or both.

This section shall not apply in the case of fire set by an allottee in the reasonable exercise of his proprietary rights in the allotment. June 25, 1948, c. 635, 62 Stat. 788.

18 USC, Section 1856. <u>Fires Left Unattended and Unextinguished</u>

Whoever, having kindled or caused to be kindled, a fire in or near any forest, timber, or other inflammable material upon any lands owned, controlled, or leased by, or under the partial, concurrent, or exclusive jurisdiction of the United States, including lands under contract for purchase or for the acquisition of which condemnation proceedings have been instituted, and including any Indian reservation or lands belonging to or occupied by any tribe or group of Indians under the authority of the United States, or any Indian allotment while the title to the same is held in trust by the United States, or while the same shall remain inalienable by the allottee without the consent of the United States, leaves said fire without totally extinguishing the same, or permits or suffers said fire to burn or spread beyond his control, or leaves or suffers said fire to burn unattended, shall be fined not more than \$500 or imprisoned not more than six months, or both.

APPENDIX C

IMPRISONMENT



APPENDIX C

IMPRISONMENT

Imprisonment is a "restraint upon a person's personal liberty" (Black 1979) and ranges from detaining someone forcibly in the public streets to incarcerating someone in a locked and barred cell. Places of imprisonment include jails, prisons, reformatories, penal farms, conservation camps, houses of correction, and county workhouses. While in some cases as many as half of those imprisoned in a jail are <u>awaiting</u> trial (Chamelin <u>et al</u>. 1975), I am concerned here with imprisonment <u>after</u> a person has been sentenced for committing a felony or misdemeanor.

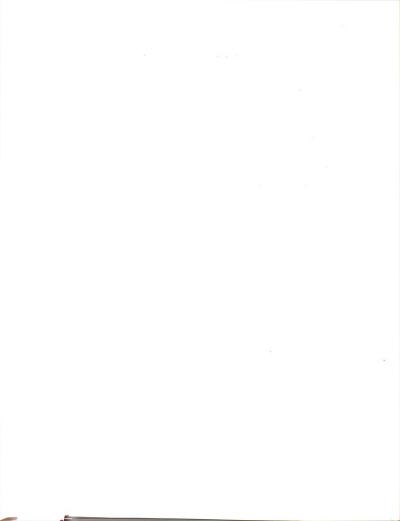
The place of imprisonment depends upon the type of court in which the case was tried, the severity of the crime committed, the kind of correctional treatment recommended by the probation officer, and the degree of security needed.

Most people convicted of misdemeanors are housed in over 4,000 locally administered jails (Chamelin et al. 1975).

These jails hold people for short periods of time (more than 48 hours but rarely over a year). (Juvenile offenders are sent to specific juvenile detention institutions in most parts of the U.S.)

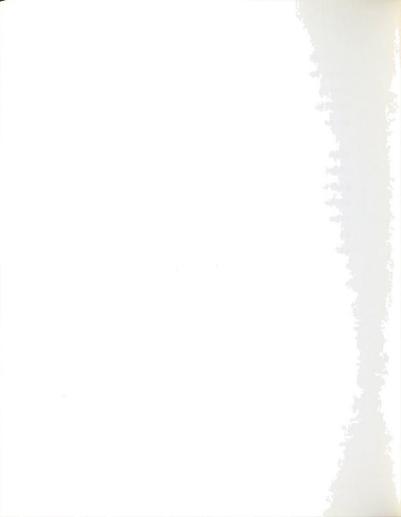
State and Federal prisons (or penitentiaries), on the other hand, detain felons for longer time periods (over 1 year). These institutions range from community custody institutions for first time offenders to maximum security prisons for hard-core criminals.

Reasons for sentencing a person to imprisonment rather than some other form of punishment (e.g., probation or a fine) are: 1) to obey laws requiring imprisonment, 2) to protect society from habitual offenders, 3) to withdraw many of the freedoms and rights to which a person is entitled in free society, 4) to discipline proven law violators, and 5) to correct, insofar as possible, the improper behavior of offenders in order to restore them to society.



APPENDIX D

COURT JURISDICTION



APPENDIX D

COURT JURISDICTION

Jurisdiction is basically the authority or legal power of a particular court (State or Federal) to hear and decide certain cases within a given geographic area. Without jurisdiction, no court can validly try and sentence a person (Chamelin et al. 1975).

According to Chamelin et al. (1975), jurisdiction has three components in criminal cases—territorial, personal, and subject matter. Territorial jurisdiction means that no court in any State has the authority to deal with criminal violations against the Federal Government or other States. Federal courts dispose of Federal crimes and State courts dispose of State crimes occurring within their boundaries.

Personal jurisdiction refers to the power of a court over the defendant's person (as opposed to property) (Black 1979). "In order for a court to have jurisdiction over the accused person, the presence of the accused in the courtroom is all that is required" (Chamelin et al. 1975). In other words, a person cannot be tried in absentia. Voluntary appearance and arrest are the two most common methods of insuring a person's presence in a courtroom.



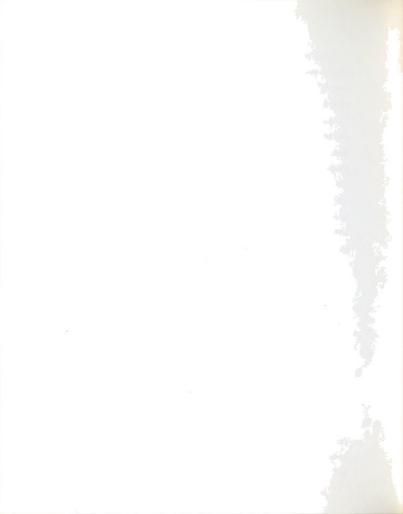
Subject matter jurisdiction is the jurisdiction of a court over a class of cases, i.e., the power of a particular court to hear the type of case before it (Black 1979). A court with limited criminal jurisdiction, for example, (i.e., the power to try minor criminal offenses) has no power to try a murder indictment; its judgment would be void and ineffective, because it lacks subject matter jurisdiction (Black 1979).

Another way of classifying jurisdiction is by the type of court, trial or appellate, hearing a case. Trial courts are usually the first to hear a case and, therefore, have original jurisdiction--authority to try a case and to determine the facts about an issue and apply the law to those facts. Appellate courts, on the other hand, generally hear and decide appeals from lower trial courts. They, therefore, have appellate jurisdiction, which gives these courts the authority to determine whether the trial court followed the correct legal procedure. Rather than trying a case or hearing the introduction of evidence, they review the trial court record (a written account of court proceedings) and the law (Rosenbauer 1978). If they find that a trial court erred, appellate courts may order a new trial or reverse the trial court's verdict without a new trial.

"Some courts have both original and appellate jurisdiction; the very lowest courts in the judicial system have original jurisdiction only, while the rest have original on some matters and appellate on others" (Bahme 1976).

APPENDIX E

THE CIVIL PROCESS



APPENDIX E

THE CIVIL PROCESS

Major steps in the process are depicted in Figure E.1.

The numbers appearing in the left margin of the figure correspond to the numbered steps below.

1. Offense (breach of contract or tort).

After a civil wrong has been committed, the "injured" person will generally search for, hire, and meet with an attorney. The attorney investigates and collects facts pertaining to the offense, decides on an appropriate remedy, conducts settlement negotiations with insurance companies or the other party's attorney, and decides to take the case to trial if an adequate settlement cannot be reached. If, however, the statute of limitations for the offense has been exceeded, the "injured" person can no longer seek a remedy in court.

2. Filing a lawsuit.

- Complaint prepared. The attorney prepares a complaint which initiates the lawsuit. It names the plaintiff and the defendant, states the alleged facts concerning the offense (allegations), and requests a prayer for damages and/or other relief.



- Complaint filed. The complaint is given to a clerk of the court (with appropriate jurisdiction) along with fees to cover court costs.
- Summons issued and served. The clerk issues a summons, attaches a copy of the complaint to it, and gives the papers to a sheriff, marshal, or professional process server who serves the papers on the defendant. A summons is a document that names the plaintiff and defendant in a lawsuit to be tried in a particular court. It directs the defendant to appear at the court within a certain period of time and states the penalty for failing to do so. Briefly, a summons alerts the defendant that a lawsuit is being undertaken against him or her.

3. Defendant's initial response.

- Failure to respond to the summons results in a default judgment. The plaintiff wins the case without going to trial.
- As a rule, as soon as the summons is served, the defendant hires an attorney or is defended by his or her insurance carrier's attorneys. Initial responses to the complaint include a:
 - Motion to Make More Specific. If the defendant thinks the complaint is simply not definite enough, he or she may ask the judge to order

the plaintiff to file a bill of particulars, which would supply additional information, within a certain number of days. A bill of particulars may also be requested in subsequent pretrial proceedings.

- Demurrer. A demurrer is an application to the court to test the legal strength of the complaint and, if the complaint is found wanting, to order it corrected or dismissed. A demurrer may allege that the lawsuit was brought in the wrong court, that the summons was improperly served, or that the plaintiff failed to state a claim (cause of action).
- Motion for Summary Judgment.

If either side feels that the facts in support of its case are beyond dispute, it can attempt to save the time and expense of a trial by asking the judge to settle the matter on the basis of affidavits. He will study affidavits presented by both sides, and if he agrees that there is no argument about the facts he is free to decide the case then and there, awarding a summary judgment to one side or the other (Dolan 1972).

A summary judgment can also be made during subsequent pretrial proceedings.

4. Answer to the lawsuit and counterclaims.

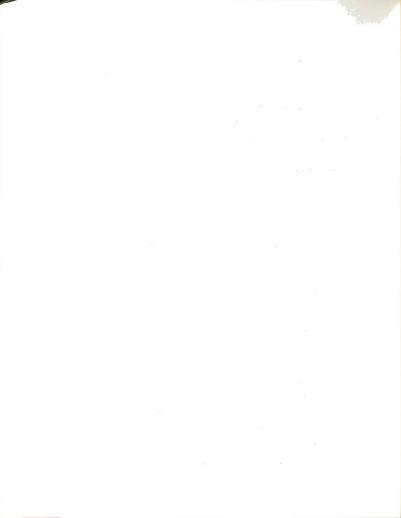
Assuming that the case was neither dismissed nor a judgment made, the defendant goes on to answer the

lawsuit. An answer is a formal, written statement by the defendant in response to the plaintiff's complaint. In it the defendant sets forth the grounds of his or her defense, i.e., the defendant admits facts that are not in dispute, denies facts that are in dispute, and sets forth defenses such as contributory negligence. The defendant may also file a counterclaim, a claim against the plaintiff, who will respond just as the defendant responded to the plaintiff's claim.

5. Pretrial proceedings.

Once the complaint and answer have been filed or change hands, the case is said to be "at issue" or to have "matured" and is placed on the court calendar or docket (a list of cases waiting to be tried). At this point the following pretrial activities may occur:

- Discovery proceedings (also called disclosure proceedings or examinations before trial). Their purposes are to help attorneys for both sides prepare for trial (get facts), diminish surprise at the trial, preserve testimony and other evidence, assist in settlement negotiations which could eliminate the trial, and save time during the trial. Types of discovery include requests for admissions of fact, interrogatories, inspections of books, records, buildings, machines, etc., physical and mental examinations, and depositions.



- Pretrial conference. A conference is usually held in the judge's chambers (with only the judge and attorneys present) or in open court (with judge, attorneys, and opposing parties present) in order to decide what issues or facts they agree on; define the issues at stake and narrow them to those essential for the successful trying of the case; agree to do away with the need for formally proving certain matters about which there is no dispute, e.g., hospital bills, lost wages, etc.; determine the possible legal questions which could arise during the trial; estimate the length of the trial, and find a common ground for settlement out of court.
- Settlement negotiations between attorneys representing the parties. These negotiations could occur at any time throughout the preparation for trial, during the trial, after the jury (if demanded) returns the verdict and before an appeal is taken, and during the pendency of an appeal.
- Jury demand. Plaintiff or defendant may file a request for a jury trial. In civil cases, a trial will generally be conducted without a jury unless it is demanded.

6. The trial.

If a jury has been demanded, I assume that it has already been selected and is seated in the courtroom.

(If a trial is heard by a judge only, similar procedures are followed in the courtroom as with a jury. However, the attorneys would not need to make opening and closing statements. After hearing all the evidence, the judge would take the case "under advisement" and then render a judgment called a "decision.")

- Opening Statements. The attorneys for the plaintiff and defendant outline the facts they expect to prove and make clear what they are asking the court and jury to do for their respective clients. The attorneys' statements are not evidence in the case. The plaintiff's attorney speaks first, and the defendant's lawyer either follows immediately thereafter or waits until his or her portion of the case begins.

- Plaintiff's Case.

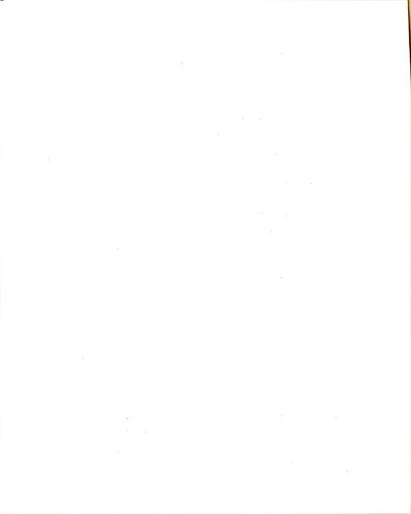
Just as the plaintiff's side is the first to present its opening statement, so is it first to present its case. From here on evidence will play the central role in the trial. Evidence is all the factual material that each side will present to prove its case and disprove the opposition's (Dolan 1972).

The plaintiff's attorney will try to prove that the defendant is liable and that the plaintiff is entitled to a certain amount of damages and/or to

other relief such as specific performance or an injunction. The primary methods for offering evidence are through questioning of subpoenaed witnesses, who can help establish the facts, and through the use of pertinent documents and exhibits brought by witnesses (via a subpoena duces tecum). Before witnesses are questioned, they must swear or affirm to tell the truth. When the plaintiff's attorney is finished examining each of his or her witnesses (called direct examination), the defendant's attorney has the right to cross-examine. The purpose for cross-examination is to test the witness's testimony and credibility by challenging facts given on direct examination or by eliciting other facts which might be damaging. defendant's attorney will attempt to discredit or cast doubt on the witness's testimony so that it will lose its probative value (relative weight of the particular evidence) before the jury.

After both direct and cross-examination of the plaintiff's witnesses (and optional re-direct examination and re-cross examination), the plaintiff will rest his or her case.

- Defendant's Motion for a Directed Verdict. At this time the defendant's lawyer will customarily make a motion for a directed verdict. By doing so, he or she is arguing that the complaint should be dismissed on



the grounds that, even if all the evidence presented by the plaintiff is true, the plaintiff has not proven that he or she has a cause of action. If the judge grants the motion of the defendant, the complaint will be dismissed and the case is over (but the plaintiff could take an appeal to the appellate court). If the judge denies the motion, the case will continue and the defendant will be required to answer the evidence of the plaintiff.

- Defendant's Case. The defendant's attorney will try to present evidence which would tend to show that the defendant is not liable to the plaintiff, to prove that the defendant has a defense that would excuse him or her from liability, and/or to present evidence that would justify reduction in the amount of damages sought by the plaintiff. The court swears in the defendant's first witness, who is examined first by the defendant's attorney and then is cross-examined by the plaintiff's attorney, and so on. "When the defendant's witnesses have finished, the plaintiff can recall some of his witnesses, or call some new ones, to give 'rebuttal' evidence--evidence to disprove some of the things the defendant's witnesses have said" (Eichner 1963).
- Motions for Directed Verdict. When all of the evidence has been presented, either one or both parties



may make a motion for a directed verdict. Basically, this means that the plaintiff or defendant (or both) thinks the evidence is so much in his or her favor that a jury could not reasonably decide in favor of the opponent. If the judge agrees and grants the motion, the trial is ended and the losing party can take an appeal to the appellate court. If the motion (or motions) is denied, the trial continues.

- Closing Statements. The attorneys for each side sum up the case for the jury from the viewpoint of their respective sides. Each attorney reviews the evidence, stressing the strong points of the case and the weaknesses of the adversary's case. The plaintiff argues first, then the defendant, and finally, the plaintiff, since he or she bears the burden of proof.
- Instructions to the Jury, Jury Deliberations, and Verdict. Before releasing the jury to consider a verdict, the judge "charges" the jury, i.e., he or she instructs the jury, beginning, for example, with a statement of the issues at stake and of the claims made by both parties.

From there [the judge] generally moves to an explanation of the general laws that apply to civil actions, including the reminder that the plaintiff need not prove his case beyond a reasonable doubt but simply show the bulk of evidence to be in his favor. Next [the judge] turns to a rundown of the laws applicable to this particular case [and] finally . . .

advises the jurors on the form that their verdict should take: it should be a decision to award or not award damages, and if it is to award it should designate the amount of the award. When the judge has concluded his remarks either attorney may object to any portion of them and may ask that additional instructions be given (Dolan 1972).

The jury then leaves the courtroom in an attempt to reach a verdict. When it returns, it will come with a verdict in hand (unless it's a "hung jury") that will be "for the plaintiff" or "for the defendant."

- Motions After Verdict. After the jury's verdict, "the losing side may ask the judge to set aside the verdict on the ground that the evidence was such that the jury could not reasonably have reached the conclusion it did, or because of some serious mistake in the conduct of the trial which may have unfairly influenced the jury" (Eichner 1963). If the motion for a new trial is granted, then the case will be heard all over again at a later date. If the motion is denied, the court enters a judgment.
- Judgment. Once the judgment (the final decision of the court resolving the dispute and determining the rights and obligations of the parties) has been made, the civil case is ended at the trial level.

7. Posttrial Activities.

Following the judgment, several things can happen:

- The losing party (defendant or plaintiff) can make an appeal to a higher court. When the trial court decides for the plaintiff and the defendant appeals, the defendant faces punishment determined by the trial court if the appeal is denied. If the plaintiff appeals after the trial court decides for the defendant and the appeal is denied, the case is dismissed.

An appeal is initiated by filing a claim of appeal with the clerk of the trial court that rendered the judgment. The clerk prepares a record that is forwarded to the appropriate appellate court. The record contains the trial pleadings (complaint, answer, etc.), transcripts of the testimony, exhibits, and instructions to the jury. In addition, the appellant (unsuccessful party) prepares a brief, filed with the appellate court, that includes the issues, a concise statement of the facts, and a legal argument wherein he or she cites the laws and cases to support his or her position. The appellant's brief is served on the appellee (successful party), who also prepares a brief and files it with the appellate court. It, in turn, is served on the appellant, who prepares a reply brief. Assuming that the appeal is granted, the appellate court usually hears an oral argument from

the attorneys representing the opposing parties. testimony is taken in the appellate court; instead, it decides the case on the basis of the record transmitted to it by the clerk of the lower court, the briefs, and the attorneys' oral arguments. appellate court then writes an opinion setting forth the facts, issues, law(s), and applications of the law(s) to facts. Based on its opinion, the court will either reverse or affirm the trial court's judgment. If the judgment is reversed, the court will either enter a final judgment (resulting in punishment for the appellant or dismissal for the appellant) or remand (send back) the case to the trial court for a new trial or for some other further proceeding (Eichner 1963). If the appeals court affirms the trial court's judgment for the plaintiff, the defendant (appellant) must pay damages or otherwise remedy the offense. If, on the other hand, it affirms a trial court's judgment for the defendant, the plaintiff's (appellant) case ends (unless there's still a higher court to which the losing party can appeal).

- If the plaintiff wins and the defendant pays the damages or otherwise remedies the situation, then the plaintiff's case is vindicated and both parties are out of the legal system.

- Likewise, if the defendant wins (and therefore is vindicated) and the plaintiff is satisfied with that decision, then both plaintiff and defendant are no longer in the legal system.
- If the defendant does not comply with the court's judgment, the court can take action to force compliance. Individuals violating injunction orders, for example, can be held in civil contempt, resulting in fines or imprisonment, until they comply with the Similarly, if the defendant does not volunorders. tarily pay damages specified in the judgment, the court can issue a writ of execution to enforce the The writ directs a law enforcement officer, judgment. such as a sheriff, to seize and sell certain property of the defendant not exempt by statute. The proceeds are used to pay the judgment. If the defendant has no property or has insufficient property to satisfy the judgment, those who owe the defendant money may be served with a garnishment process whereby the court directs them to pay the money to the plaintiff rather than the defendant. Once restitution has been made, the civil process is completed.



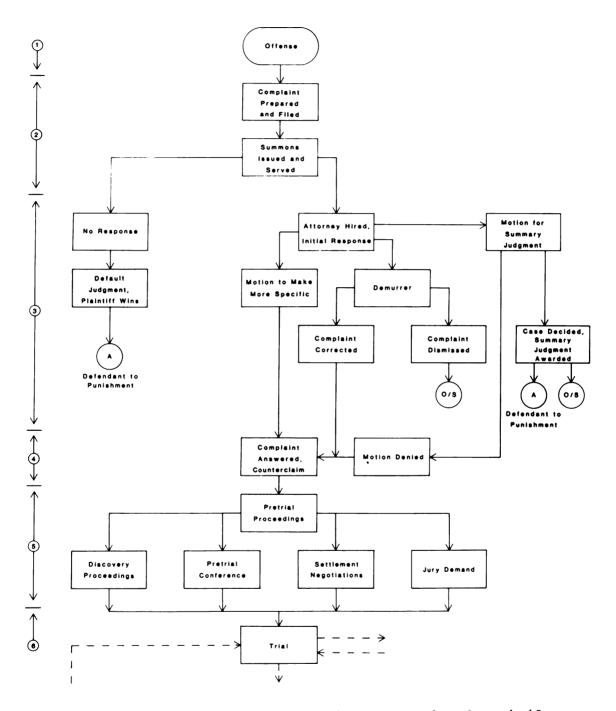
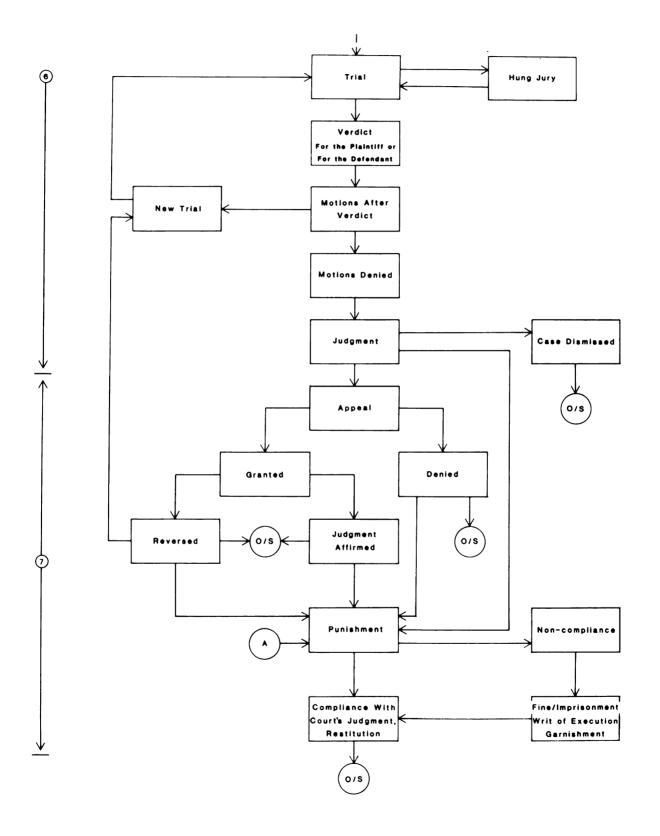


Figure E.l. A summary of major steps in the civil process. The numbers in the left margin correspond to the numbered steps in the civil process outlined in Appendix E.

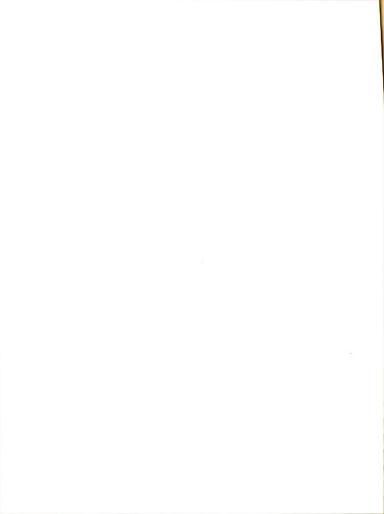


Figure E.l (cont'd.).





APPENDIX F THE CRIMINAL PROCESS



APPENDIX F

THE CRIMINAL PROCESS

Major steps in the process are depicted in Figure F.1.

The numbers appearing in the left margin of the figure correspond to the numbered steps below.

INPUT

1. Detecting and Reporting a Criminal Offense.

"Input [into the criminal process] occurs when a crime is committed and its commission is somehow [detected and] made known" (Chamelin et al. 1975).

Crimes can be detected and reported in a number of ways. For example, a "crime may be observed by a private citizen who reports it . . . to the police; a police officer may observe the commission of a crime; [or] a grand jury may discover the commission of the crime upon an investigation undertaken of its own initiative" (Chamelin et al. 1975).

2. Identifying the Offender.

This second and obvious stage of input may require little effort (e.g., when a crime is committed in the presence of a police officer) or it may take days,



weeks, months, or years. But without it, the criminal process cannot commence (Chamelin et al. 1975). (In addition, if the statute of limitations for the crime has been exceeded, the process may not be invoked.)

PRETRIAL PROCESS

3. <u>Investigation and/or Arrest, Court Summons, Citation,</u> or Violation Notice.

An "arrest may or may not be the first step in the pretrial process. . . [This depends on] the method by which the existence of a crime and the identification of an offender is made known" (Chamelin et al. 1975). If a felony or misdemeanor is committed in the presence of an officer (or private citizen) or if an officer has probable cause to believe a person has committed a crime, he or she may arrest the suspected law violator immediately without a warrant.

An arrest may be preceded, however, by a grand jury or law enforcement officer investigation. The investigation can include "the search and recording of the crime scene, the collection and preservation of evidence, . . . the uncovering of all sources of information, the surveillance of suspects, their interview and interrogation, [and] the interview of witnesses and victims" (Germann et al. 1977).

on Whole

noari nach Lony Lavan Lavan Caron Sano Sano

enting enting fin nation

After an investigation (which may continue throughout the pretrial process) the case will either be dropped because of insufficient evidence or an arrest warrant may be issued. "Arrest with a warrant may be used for all types of offenses--felonies and misdemean-Such an arrest normally follows the filing of a complaint by the prosecuting attorney alleging the commission of a crime" (Berkley et al. 1976). complaint is filed with a U.S. Magistrate (in a Federal matter) or a State trial court judge. "If a magistrate is convinced that the crime alleged in the complaint has been committed by the accused, he may issue a warrant of arrest" (Berkley et al. 1976). An arrest, with or without a warrant, does not prove someone is guilty and is not a punishment. Its purpose is to insure the presence of an accused person to answer charges before a court of law.

For minor criminal offenses, a summons, citation, or violation notice is often issued in lieu of arrest, thus avoiding taking a suspect into immediate physical custody. "A summons is a written document that notifies an individual that he has been charged with an offense and orders him to appear in court at a certain time and date to answer the charge" (Chamelin et al. 1975). If a summons is ignored, a warrant is issued for the offender's immediate arrest. A citation or violation notice is used most often for petty offense misdemeanors

such as minor traffic violations and operates in the same manner as a court summons. It describes the nature and location of the offense and commands the suspect to pay a fine or to appear before a certain court on a specified day. If a citation or violation notice is ignored, a court summons or arrest warrant can be issued. When authorized, a verbal or written warning can be issued instead of a violation notice if an offense was due to inadvertance, misunderstanding, or misinformation.

4. Booking.

Booking is an administrative record of arrest. It involves entering the date, the time, the suspect's name and address, the specific charge against him or her, and other relevant facts on the police "blotter"; photographing and fingerprinting the suspect; and inventorying the suspect's personal belongings.

5. Initial Incarceration.

After booking, a suspected law violator is formally detained in a city or county jail, pending a hearing. If the prisoner remains in custody, he or she must appear before a judicial officer—generally a judge or magistrate (sometimes called a committing magistrate)—as soon as possible. He or she can be released from custody, however, by posting bail, by a writ of habeas

corpus, or by a waiver or discharge. A writ of habeas corpus is an order from the court "commanding that the person detaining another produce the prisoner" (Germann et al. 1977). If the court decides that there is insufficient cause for detaining the prisoner, the suspect will be released. A person may be given a waiver or discharge if a prosecutor refuses to issue a formal accusation due to insufficient evidence or if the person's innocence becomes obvious after investigation.

6. <u>Initial Appearance</u>.

The initial appearance of a suspect before a judge or magistrate may serve one or more functions depending on local procedure and the seriousness of the offense. The primary purposes are to inform the suspect of the charge(s) against him or her and to advise the person of his or her constitutional rights. Bail may also be set during the initial appearance.

⁴⁰Bail may consist of either a cash deposit left with the court by the individual or security put up by a licensed bonding company (or others) that will guarantee the individual's appearance in court at the required time. According to Berkley et al. (1976), bail may be specified on the arrest warrant or on a schedule provided to the police by a magistrate; "This is most frequently the case for misdemeanors. By posting the amount specified on the warrant or the schedule, the defendant may gain release prior to the initial appearance." Bail may be set after booking and before the initial appearance, before or after the preliminary examination, the arraignment, the trial, the sentence, or pending an appeal (Germann et al. 1977).

In addition, petty offense (low) misdemeanors can be tried summarily at this point by a judge (without a jury) having trial jurisdiction. After receiving the formal notice of charge and advice of rights, the defendant will be asked to plead to the charge. If the plea is guilty or nolo contendere (no contest), the judge may sentence the defendant immediately. Likewise, if the plea is not guilty and the complaining witness is available when the plea is entered (or in the case of high misdemeanors, the defendant waives a trial by jury), the judge may try the case without further delay. The initial appearance is the only step in the criminal process in which cases can be disposed of in this manner (Berkley et al. 1976).

7. Preliminary Hearing.

Following the initial appearance by the accused, a preliminary hearing, although optional, is usually held before a judge or committing magistrate. The judge decides, in light of the evidence presented by the prosecutor, whether or not the crime charged did occur

⁴¹ Although a defendant can waive a preliminary hearing because he or she intends to plead guilty or has little hope of gaining a dismissal, most defense attorneys recommend against a waiver. The preliminary hearing not only presents an opportunity for dismissal from the criminal process but it also serves as a tool of discovery for the defense. Although the prosecutor must present enough of his or her evidence to establish probable cause, the defense may crossexamine but need not present evidence or witnesses.

Å.

twiff two

defendant pida in

donation and a donati

oodbro

tot for a

Spending .

avoid (A) be a compared to the compared to the

and whether or not it's reasonable to believe that the accused may have committed it (Germann et al. 1977). If sufficient probable cause has been shown, the judge will bind the case over to the appropriate court for trial (and, depending on the situation, set bail or remand the defendant to jail) (Chamelin et al. 1975). If probable cause has not been established, the case against the defendant is dismissed, at least temporarily, for lack of evidence. (After dismissal, the prosecutor can file an information against the accused or a grand jury may return an indictment.) One of the primary functions of the preliminary hearing, therefore, is to limit unwarranted prosecutions. During the preliminary hearing, which is not a trial to determine guilt or innocence, charges against the defendant may also be reduced.

8. Information or Indictment.

After the preliminary hearing, the prosecutor (or district attorney) will prepare an information for the trial court. An information is a written accusation against a person for some criminal offense (a felony or a misdemeanor), without an indictment (Black 1979).

Although it resembles in form and substance an indictment, it differs in that it is presented by a public prosecutor instead of a grand jury.

An alternative to the filing of an information is the filing of a grand jury indictment. An indictment is a "formal, written accusation originating with a prosecutor [but] issued by a grand jury against a [person] charged with a crime" (usually a felony) (Black 1979). "Like the preliminary hearing, the grand jury is designed to protect the defendant from unwarranted prosecutions. Unlike the preliminary hearing, however, the proceedings . . . are in secret, and the prosecution simply places its case before the jury" (Berkley et al. The grand jury "functions similarly to the committing magistrate by examining facts surrounding a crime and determining if probable cause exists to order an accused held for trial. . . . If the jury decides there is sufficient evidence, it issues a 'true bill' of indictment. If it finds the allegations are unwarranted, it hands down a 'no bill'" (Chamelin et al. 1975).42 The U.S. Constitution requires that a grand jury be used for all Federal felony cases; many States also require grand juries for felonies (and in some

⁴²In addition to their function as an accusatory body, grand juries also have investigative powers; they can investigate, on their own initiative at the request of another official or private citizen, matters of public interest or other possible criminal infractions (Chamelin et al. 1975). Then, if appropriate, grand juries may seek criminal charges against suspected law violators. They do not always have to wait for a prosecuting attorney to initiate the proceedings. As a result, a grand jury may, in some cases, initiate the criminal process; an indictment can be returned before a defendant has been taken into custody and a bench warrant subsequently issued for his or her arrest.

cases, high misdemeanors). But, if a defendant waives indictment by a grand jury, prosecutions of all but capital offenses can begin by filing an information. "Waivers are frequent and most prosecutions of even serious [crimes] in [State and Federal] courts are by information" (Gibney, ed. 1979).

9. Arraignment.

The arraignment is a procedure whereby the defendant is brought before a judge of a trial court⁴³ to plead to the criminal charge in the indictment or information (Black 1979). The charge is read to him or her and the defendant is asked to enter a plea. The defendant may stand mute (say nothing) or plead one of three ways—not guilty, guilty, or nolo contendere. If the defendant stands mute (the court automatically enters a plea of not guilty for the accused) or pleads not guilty, the judge will set a trial date. If a criminal trial is required, the defendant can choose at the arraignment whether to be tried by a judge or by a jury.

The defendant may plead guilty as charged or to a lesser offense (often resulting from plea bargaining). If the guilty plea is accepted, the judge will set the date and time for sentencing. But, if the court refuses to accept a guilty plea, it will enter a plea of not

⁴³"In the federal system, the arraignment is usually before a U.S. district judge although U.S. magistrates can and have presided over arraignments" (Berkley et al. 1976).

guilty. If the plea is <u>nolo contendere</u>, it is treated as a guilty plea although it is not an admission of guilt but a willingness of the accused to accept conviction and not go to trial. If civil action against the defendant is likely, he or she can, by pleading <u>nolo contendere</u>, avoid having the guilty plea to the criminal offense become a part of the trial for the civil offense (Germann et al. 1977).

During the arraignment, pretrial motions "are usually made by the defense attorney for the purpose of doing all in his power to have the charges dismissed, have evidence possessed by the state declared inadmissable, or find out as much as he can about the state's case in order that he may better prepare his defense" (Chamelin et al. 1975). These motions may include, for example, a motion to suppress evidence (the defense attempts to show that some evidence was obtained illegally) or a motion for dismissal due to lack of evidence. If the defense feels that a fair trial is unlikely in the area where the crime was committed, he or she may also make a motion for change of venue.

Pretrial motions serve two other purposes. They can be used to delay the trial, giving the defense additional time, but, more importantly, to answer many legal questions, allowing the judge to decide on matters before the trial rather than during the trial, resulting in a savings of time and money (Chamelin et al. 1975).



TRIAL PROCESS

10. Trial

Once it starts, a criminal jury trial is very similar to a civil trial (Appendix E). I assume the jury has been selected and is seated in the courtroom.

- Opening Statements by the Prosecution and Defense.

 The purpose of the prosecutor's opening statements is to "set the stage," to explain the general facts of the case, the issue or issues to be tried, and what is going to be proved to the jury. If the defense chooses to make opening remarks (it can reserve its statements until the state [prosecutor] has presented its case), the counselor will reveal how he or she plans to show the weaknesses in the state's case and convince the jury of the defendant's innocence.
- Prosecutor's (or state's) Case. The prosecutor calls witnesses and presents evidence to show that a crime was committed and that the defendant committed it (Chamelin et al. 1975). Witnesses, including members of law enforcement agencies, will present evidence for the state under sworn testimony. After the prosecutor examines each witness and is satisfied that the witness has supplied the necessary information, the defense attorney is given the opportunity to crossexamine the witness—to "impeach" or destroy the

credibility of the witness and/or his or her testimony in the minds of the jurors. The cycle of direct examination and cross-examination continues with each witness until the state has presented all of its evidence (Berkley et al. 1976). When the state feels that it has done as much as possible in meeting the proof required in the particular crime and in showing the defendant's guilt, it rests its case.

- Motion for Dismissal or Directed Verdict. At the close of the prosecutor's case, the defense usually asks for the dismissal of the case or for a directed verdict of innocence or acquittal. These motions may be made on the grounds that the prosecutor failed to show, for example, that a crime was committed, that the defendant committed the crime, or that the defendant's guilt has been shown beyond a reasonable doubt (Chamelin et al. 1975). If the motion is granted, the case is dismissed and the defendant freed. If the motion is denied, however, the defense must present its case to the jury.
- Defense's Case. "The pattern of presentation of the defendant's case is the same as that for the state.

 The roles are simply changed" (Berkley et al. 1976).

 The defense attorney directly examines his or her witnesses and then offers them to the prosecutor for cross-examination. "The defense is not required to



prove innocence of the defendant but rather to show that the state has not or cannot prove his guilt" (Chamelin et al. 1975). The defense rests its case when all the witnesses have testified and all the evidence has been presented.

- Rebuttal and Surrebuttal. After the defense rests its case, the prosecutor may call rebuttal witnesses to refute the testimony of the defense witnesses and bolster the state's case if it has been weakened by the defense. The defense may, in turn, engage in surrebuttal by bringing forth additional witnesses to challenge points raised by the state's witnesses.
- Motion for Dismissal or Directed Verdict. If the defense counsel did not move for dismissal earlier, this motion usually will be made after the defense surrebuttal. If the motion is denied, both sides will make their summations or closing statements.
- Closing Statements. Both the prosecuting and defense attorneys attempt to review the law and facts for the judge and jury and to summarize the important facets of the case (Germann et al. 1977). The prosecutor will emphasize the strong points of evidence against the defendant, while the defense will point out the weaknesses in the prosecutor's case and emphasize that the burden of proof is on the state (Berkley et al. 1976).

- Instructions to the Jury, Jury Deliberations, and

Verdict. Before releasing the jury to consider a verdict, the judge instructs or "charges" the jury, i.e.,

he or she sums up the case and tells the jury about

the rules of law that should be applied to the facts

of the case. The judge may, for example, talk about

the meaning of "burden of proof" and "presumption of

innocence" and discuss the procedures the jury should

use in reaching a verdict.

After receiving the judge's instructions, the jury retires to the jury room to begin secretly discussing and voting on its verdict. When a verdict is reached, the judge reconvenes the court and the jury is brought in to announce its verdict. If the verdict is not guilty, the case is dismissed and the defendant is freed. If the verdict is guilty, 44 a date is set for sentencing and the judge usually requests a presentence investigation.

POSTTRIAL PROCESS

11. Motions After Verdict

Before sentencing, a motion for a directed verdict (requesting the judge to reverse the jury's decision or

^{44&}quot;In trials before a judge, two verdicts are possible, guilty or not guilty. When the trial is before a jury, the possibility of a 'hung' jury is added. The defendant is usually retried when a hung jury occurs. In some circumstances, however, the judge may dismiss the case" (Berkley et al. 1976).

substitute his or her judgment for the jury's) or a motion for a new trial is generally in order. The defense will most often move for a new trial on a number of grounds ranging from misconduct of the jury to errors of the judge. "If a mistrial is declared or a new trial is granted, the accused will be placed on bail or remanded to custody until the time of the new trial" (Germann et al. 1977).

12. Presentence Investigation.

If the defendant does not win a new trial, then a presentence investigation usually occurs. Generally, a probation or parole officer investigates the background of the proven law violator—the family history, former criminal convictions, education, work performance, etc.—and submits a report with recommendations for the sentence and treatment programs. Although a criminal statute declares an act a crime and also names maximum punishments, the judge can individualize the sentence based on the probation officer's report or even on his or her own intuition.

13. Sentence.

When the proven law violator appears for sentencing, the judge has a variety of punishments that can be imposed depending on the crime, the presentence investigation, and statutory demands (Germann et al. 1977).

Some of the sentences which may be given include fine, suspended sentence, probation, imprisonment, and in some States, execution.

14. Appeal.

Following the sentence, the offender may appeal his or her conviction, but the "appeal must be based on a legal error--a misinterpretation or misapplication of the law by the trial judge" (Berkley et al. 1976). If the case was first heard in a minor court, the next court will hear it de novo (as new), since many courts do not keep a record of the proceedings. If the case was heard from a court of general jurisdiction, however, (e.g., a circuit court), the case for appeal is made on the transcript (record) of the first court and is heard in an appellate court. "The appellate court may affirm the finding of the lower court; may modify or reduce the degree of offense or punishment imposed; may reverse the finding of the lower court; may set aside, affirm, or modify proceedings around judgment; or may authorize a new trial" (Germann et al. 1977).

15. Punishment (Corrections) and Release.

If the appellant (the defendant) does not win an appeal, he or she must satisfy the terms of the sentence given after conviction (e.g., fine, probation, imprisonment, death, or removal from or disqualification to hold office). Once proven law violators have paid fines or

have been released on suspended sentences, they go back into society as free persons. (If fines are not paid, the offender may be incarcerated.) If given probation, an alternative to a jail or prison sentence, they receive out-of-jail supervision by an officer of the court. "Specific conditions [are] imposed on the probationer. . . A violation of one or more of the conditions [e.g., keeping regular hours, maintaining gainful employment, avoiding public drunkenness] could result in the revocation of probation and imprisonment of the offender" (Berkley et al. 1976).

If sentenced to jail or prison terms, offenders have a chance for rehabilitation, counseling, and perhaps an education. If approved by a State parole board or the U.S. Parole Board, offenders may be placed on parole. Parole is "a conditional release of a prisoner, generally under the supervision of a parole officer, who has served part of the term for which he was sentenced" (Black 1979). If a parollee violates the rules of parole, he or she may be reprimanded, penalized by more rigid rules, or sent back to jail or prison to serve the rest of the sentence.

Other releases from incarceration include mandatory/conditional release, a commuted sentence, a pardon, or an expired sentence (serves term). Mandatory or conditional releases, provided by several States, free all or designated prisoners 6 months or more prior

to the expiration of their sentences. They allow prisoners to adjust, under supervised conditions, to life outside prison walls. A commuted sentence is an executive reduction or change in punishment to one which is less severe, e.g., from execution to life imprisonment. A pardon, an "act of grace" from the executive branch of government, releases the offender from the entire punishment prescribed for the offense (Black 1979). A pardon releases an incarcerated law violator directly into society as does an expired sentence.

Two-thirds of <u>all</u> releases are by expiration of sentence. . . The persons released by discharge are usually those who are the most difficult to rehabilitate and have therefore been denied paroles. Some jurisdictions do not discharge without supervision because gradual reentry into society is most needed by the difficult offenders and society needs some protection until they are adjusted. All types of parole and other release procedures, of course, are designed to return the offender from the prison or correctional institution to the free community and keep him there (Chamelin et al. 1975).

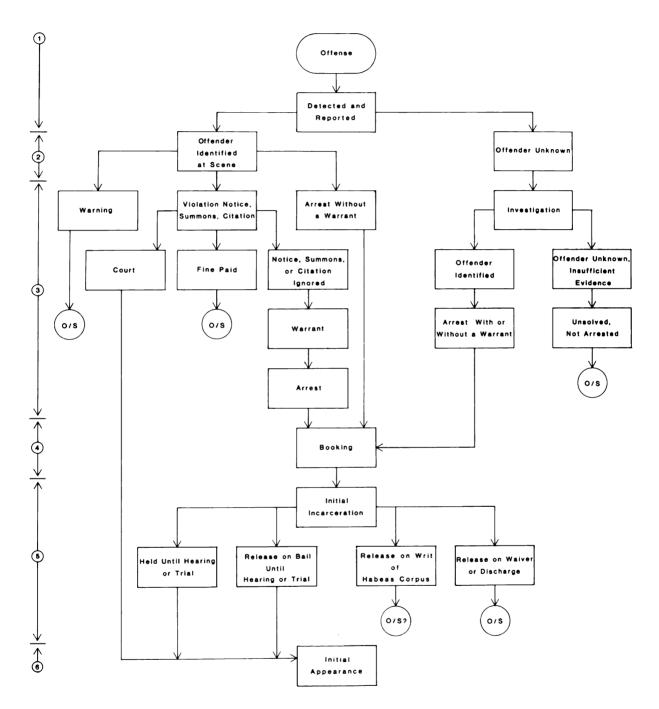


Figure F.1. A summary of major steps in the criminal process. The numbers in the left margin correspond to the numbered steps in the criminal process outlined in Appendix F. Procedures for handling juvenile offenses are not included.

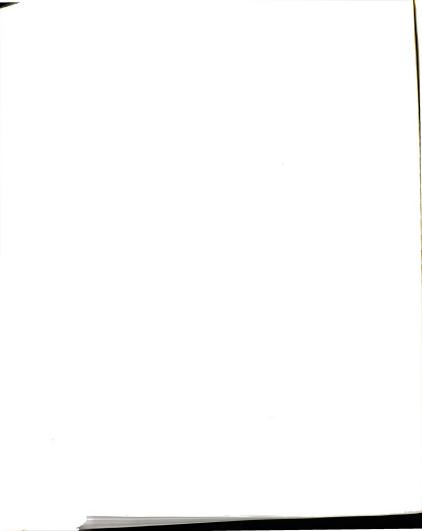
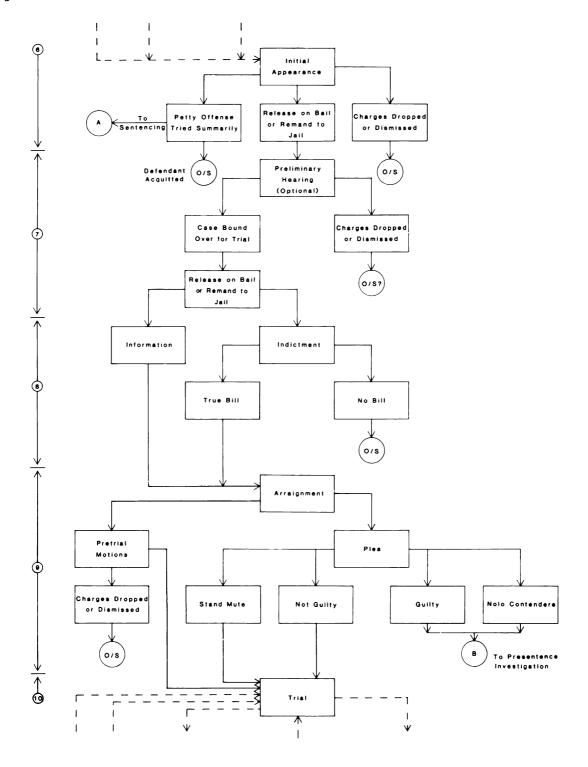


Figure F.1 (cont'd.).



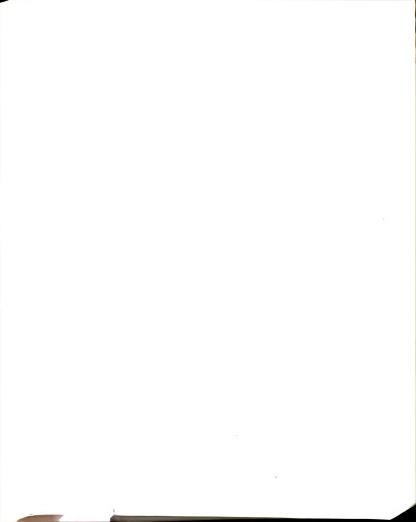


Figure F.1 (cont'd.).

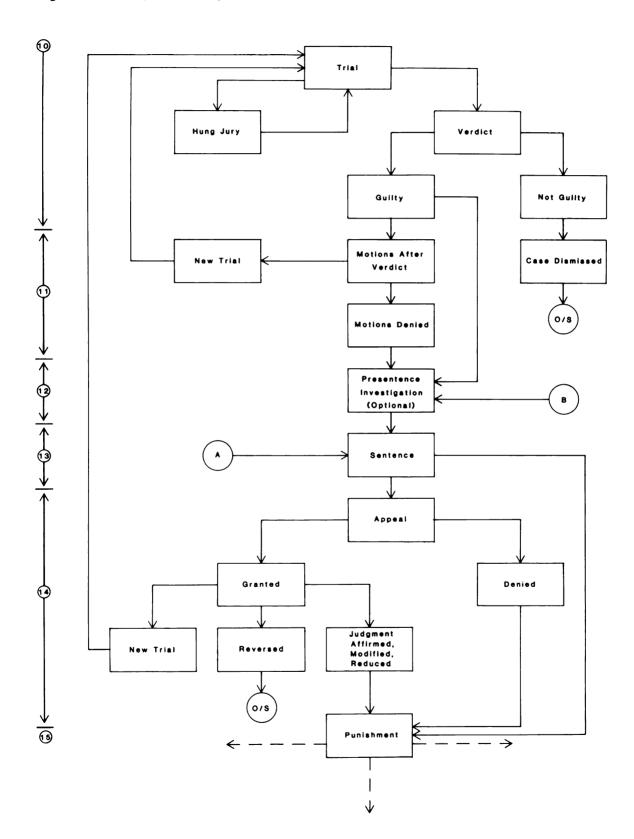
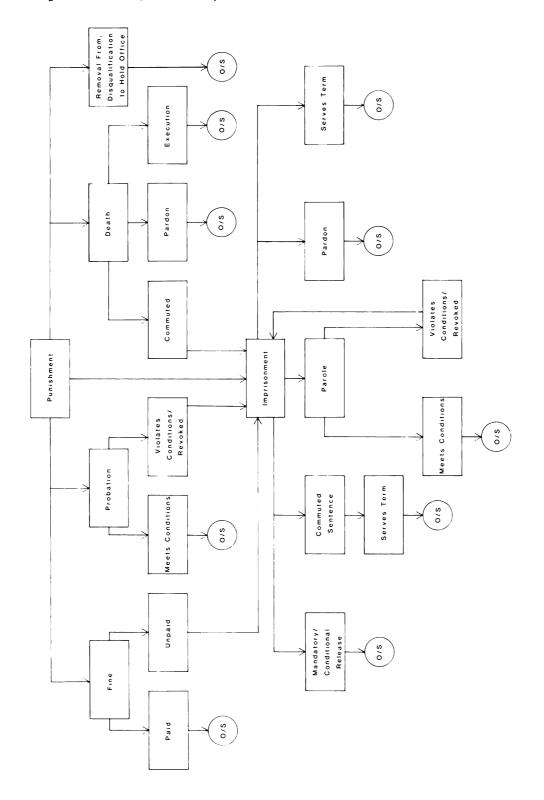




Figure F.1 (cont'd.).



<u>=</u>		

APPENDIX G

SIMILARITIES AND DIFFERENCES
BETWEEN THE CIVIL AND CRIMINAL PROCESSES



APPENDIX G

SIMILARITIES AND DIFFERENCES BETWEEN THE CIVIL AND CRIMINAL PROCESSES

Some of the major similarities and differences between the civil and criminal processes are discussed below:

- A civil case can be initiated by anyone with a complaint, including the government (e.g., as in contract defaults). A criminal case can only be initiated by the government, representing the people. Even though a crime may be directed at one person, it is considered an offense against the public.
- In a civil case, the private citizen, organization, institution, or governmental body initiating a lawsuit as "victim" is called the plaintiff. In a criminal case, the victim cannot initiate the action; the people, represented by a prosecutor, initiate the case. The complainant ("victim") may be called the complaining witness or the prosecuting witness and may be the chief source of evidence against the charged law violator. In both cases, the person charged is called the defendant.
- In civil suits, the plaintiff employs a self-chosen attorney and knows the attorney will work in his or her best interest. In criminal cases, the victim has little say

about how the case will be handled. Because criminal cases are brought in the public interest and are controlled by public prosecutors, a prosecutor may dismiss an action over the objections of the victim (the complaining or prosecuting witness) or may press for a prosecution even though the defendant and victim have settled their differences. (The victim cannot make private agreements with the defendant that would absolve the defendant of guilt.)

- In both civil and criminal cases, the defendant has a right to employ the services of a counsel of his or her own choosing. If defendants facing serious criminal charges cannot afford to employ counsel for themselves, they have a right, under the U.S. Constitution, to a court-appointed defense counsel paid for by the government. No similar right exists in civil or in minor criminal cases.
- Many civil cases are settled out of court or even before the case gets to court. Very few criminal cases are settled out of court.
- When a defendant's act leads to both civil and criminal action, theoretically, the actions are entirely separate and may even be filed in separate States. Most civil actions can be filed anywhere the defendant can be found,

while criminal actions must be filed where the criminal act occurred.

The outcome of the criminal case (which is tried first) does not ordinarily affect the outcome of the civil case, because the standards of proof required are different. However, once criminal guilt has been established, that guilt can carry weight in civil court.

- A grand jury may be convened to aid the prosecutor in investigating a suspected crime, to determine whether criminal charges should be made, and, if so, what charge and against whom. Witnesses may be compelled by a grand jury to appear, testify, and produce documents in secret sessions excluding the public. (In fact, witnesses' attorneys are not even permitted to attend.) No grand jury procedure is available to help with investigations in civil cases.
- In a civil case, the plaintiff can subpoen the defendant and force him or her to testify under oath and to produce business files and records that contain evidence damaging to the defendant. The prosecutor in a criminal case, however, cannot use the defendant's testimony unless the defendant elects to testify. Under the U.S. Constitution, no person can be compelled in a criminal case to be a witness against himself or herself.

- Rules of procedure in civil cases are different from rules of procedure in criminal cases. For example, in a civil case the defendant's answer to a charge is in writing and is filed with the court clerk, while in a criminal case the answer is given orally in open court.
- In civil cases, plaintiffs and defendants will not have a jury unless they demand one. In a criminal case, a defendant can have a jury unless he or she waives the right to a trial by jury. (Petty offense cases are the one exception; a defendant cannot have a jury.)
- Once the plaintiff/prosecutor and defendant have rested their cases and the judge has instructed the jury on the law, the jury retires to determine the verdict. In a civil case, the jury would "find for the defendant" or "find for the plaintiff," and, if the latter, might name the sum of money the defendant must pay the plaintiff to rectify the wrong.

If the jury finds a defendant in a criminal case guilty, in some States the jury might have to determine the punishment. (Elsewhere, and in Federal courts, the judge sets the sentence.) In court, the jury will find the defendant guilty as charged or not guilty.

- In a civil case, damages are payable to the victim (except for court costs). If the defendant fails to pay, the money owed is collected by such procedures as seizure and

sale of the defendant's property or by garnishment of his or her wages. Generally, defendants are not imprisoned for failure to pay damages (unless they have lied under oath about their assets, for example).

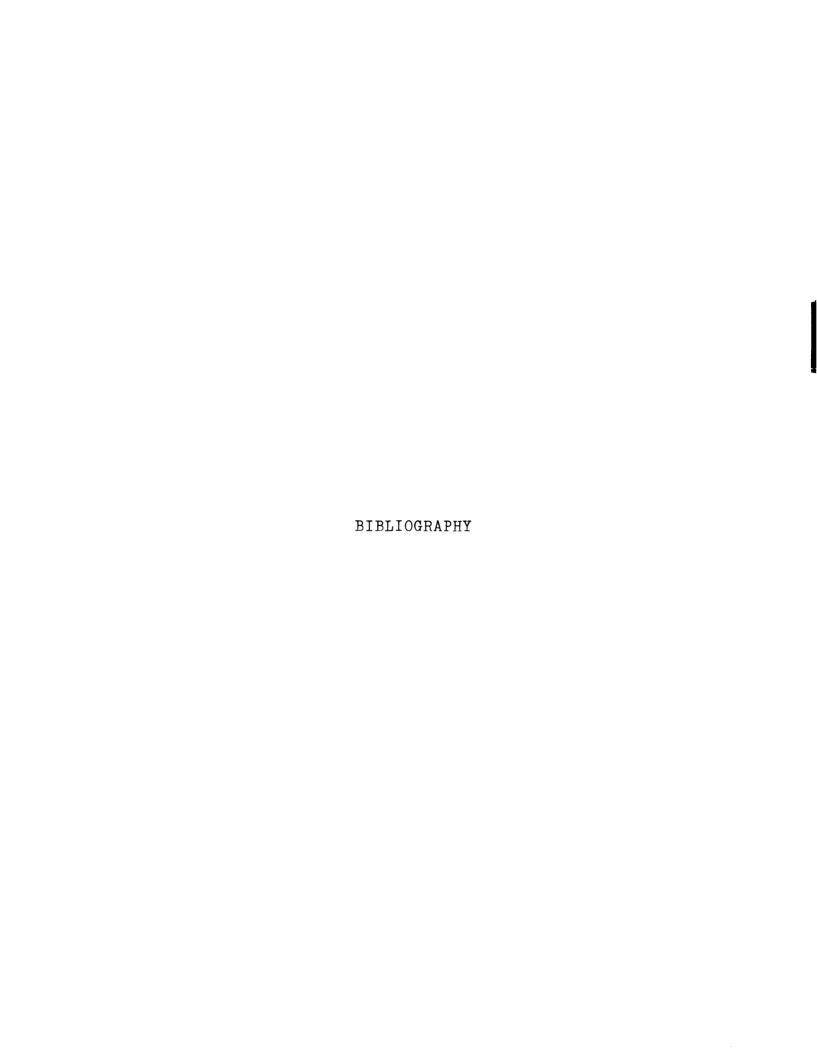
If a defendant owes money in a criminal case, the money is payable to the state as a fine and no part of it goes to the victim. Of course, sometimes judges exert pressure on defendants to return stolen property or to compensate the victim for damaged property. If a defendant fails to pay, he or she is generally imprisoned. The enforcement of the people's rights in a criminal case is considerably more certain than the enforcement of the plaintiff's rights in a civil case.

-The plaintiff in a civil case wins if he or she shows that the <u>preponderance</u> of evidence is on his or her side. This means that the plaintiff must persuade the judge or jury that he or she is somewhat more likely to be right than the defendant.

The people win a criminal case only if the defendant's guilt is established beyond a reasonable doubt, for the "burden of proof" rests with the state, and a person is presumed to be innocent until proven guilty in a court of law. If the defendant's attorney can show there is a "reasonable doubt" about his or her client's guilt, the defendant may be declared not guilty of the criminal charges.

- The purpose of a civil suit is to rectify a noncriminal wrong by compensating the person wronged, usually through monetary damages. The purpose of a criminal action is to determine the innocence or guilt of a suspected wrongdoer, and if he or she is found guilty, to assign a punishment.
- In a civil case, the losing side can appeal the decision to a higher court if they feel that the suit was improperly conducted. If the defendant is found guilty in a criminal case, he or she may also appeal. If the defendant in a criminal case is found not guilty, however, the prosecutor generally cannot appeal to a higher court because the U.S. Constitution states, "Nor shall any person be subject for the same offence to be twice put in jeopardy."







BIBLIOGRAPHY

- Andersen, Ernest V. Some law enforcement roles in wildland fire prevention in the 1980's. Fire Mgt. Notes 41(3): 13-14: 1980.
- Bahme, Charles W. Fire service and the law. Boston: National Fire Protection Association; 1976. 276 p.
- Bergoffen, William W. 100 Years of Federal forestry. Agric. Inf. Bull. 402. Washington, DC: U.S. Department of Agriculture, Forest Service; 1976. 199 p.
- Berkley, George E.; Giles, Michael W.; Hackett, Jerry F.; Kassoff, Norman C. Introduction to criminal justice: police, courts, corrections. Boston: Holbrook Press, Inc.; 1976. 513 p.
- Black, Henry Campbell. Black's law dictionary. 5th ed. St. Paul, MN: West Publishing Co.; 1979. 1511 p.
- Chamelin, Neil C.; Fox, Vernon B.; Whisenand, Paul M.
 Introduction to criminal justice. Englewood Cliffs, NJ:
 Prentice-Hall; 1975. 468 p.
- Chandler, Craig; Cheney, Phillip; Thomas, Philip; Trabaud, Louis; Williams, Dave. Forest fire management and organization. Vol. II: Fire in forestry. New York: John Wiley & Son; (In press). 470 p.
- Cohen, Morris L. Legal research in a nutshell. 2nd ed. St. Paul, MN: West Publishing Co.; 1971. 259 p.
- Deeming, John E.; Burgan, Robert E.; Cohen, Jack D. The National Fire-Danger Rating System--1978. Gen. Tech. Rep. INT-39. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station; 1977. 63 p.
- Dolan, Edward F., Jr. Legal action: a layman's guide. Chicago: Henry Regnery; 1972. 299 p.
- Eichner, James A. Law. New York: Franklin Watts; 1963. 87 p.
- Eldredge, Bonnie, ed. An inside look at law enforcement in National Forests. Intermountain Reporter November: 8-9; 1981.



- Ferguson, John H.; McHenry, Dean E. The American Federal Government. 5th ed. New York: McGraw-Hill; 1959. 650 p.
- Germann, A. C.; Day, Frank D.; Gallati, Robert R. J.
 Introduction to law enforcement and criminal justice.
 Springfield, IL: Charles C. Thomas, Pub.; 1977. 507 p.
- Gibney, Frank, ed. Law in America: how and why it works.
 Bantam ed. New York, NY: Bantam/Britannica Books; 1979.
 270 p.
- Gottfredson, Michael R.; Hindelang, Michael J.; Parisi, Nicolette, eds. Sourcebook of criminal justice statistics--1977. Washington, DC: U.S. Department of Justice, Law Enforcement Assistance Administration, National Criminal Justice Information and Statistics Service; 1978. 802 p.
- Haines, Donald A.; Johnson Von J.; Main, William A. Wildfire atlas of the northeastern and north central States.

 Res. Pap. NC-16. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station; 1975. 25 p., illus.
- Haines, Donald A.; Main, William A. Variation of six measures of fire activity associated with drought. In: Proceedings, Fifth joint conference on fire and forest meteorology; 1978 March 14-16; Atlantic City, NJ. Boston, MA: American Meteorological Society; 1978: 5-7.
- Hemphill, Charles F.; Hemphill, Phyllis D. The dictionary of practical law. Englewood Cliffs, NJ: Prentice-Hall; 1979. 231 p.
- Kempin, Frederick G., Jr. Historical introduction to Anglo-American law in a nutshell. 2nd ed. St. Paul, MN: West Publishing Co.; 1973. 280 p.
- National Oceanic and Atmospheric Administration. Climatic atlas of the United States. Washington, DC: U.S. Department of Commerce, National Oceanic and Atmospheric Administration; 1968. 80 p.
- National Oceanic and Atmospheric Administration.
 Climatological data--national summary 1970-1981.
 Asheville, NC: U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Vol. 21-32.
- Office of the Federal Register. The United States Government manual 1981/82. Washington, DC: General Services Administration, National Archives and Records Service, Office of Federal Register; 1981. 948 p.

- Rosenbauer, Donna L. Introduction to fire protection law. Boston: National Fire Protection Association; 1978. 524 p.
- Ryan, Thomas A., Jr.; Joiner, Brian L.; Ryan, Barbara F. MINITAB student handbook. North Scituate, MA: Duxbury Press; 1976. 341 p.
- Sokal, Robert R.; Rohlf, F. James. Biometry: the principles and practice of statistics in biological research. San Francisco: W. H. Freeman and Co.: 1969. 776 p.
- U.S. Bureau of the Census. Statistical abstract of the United States: 1981. 102d edition. Washington, DC: U.S. Bureau of the Census: 1981. 1031 p.
- U.S. Department of Agriculture, Forest Service. National Forest fire reports 1975-1980. Washington, DC: U.S. Department of Agriculture, Forest Service; 1976-1981 51 p., 51 p., 54 p., 53 p., 56 p., 55 p.
- U.S. Department of Agriculture, Forest Service. The principal laws relating to Forest Service activities. Agric. Handb. 453. Washington, DC: U.S. Department of Agriculture, Forest Service; 1978. 359 p.
- U.S. Department of Agriculture, Forest Service. Wildfire statistics 1970-1981. Washington, DC: U.S. Department of Agriculture, Forest Service; 1971-77, 1979, 1980; 59 p., 61 p., 57 p., 72 p., 57 p., 61 p., 57 p., 53 p., 56 p. (Wildfire Statistics 1979-1981 are in press.)
- U.S. General Accounting Office. Report to the Secretaries of Agriculture and the Interior: illegal and unauthorized activities on public lands—a problem with serious implications. CED-82-48. Washington, DC: U.S. General Accounting Office: 1982. 22 p.
- Wonnacott, Thomas H.; Wonnacott, Ronald J. Introductory statistics for business and economics. 2d ed. Santa Barbara: John Wiley: 1977. 753 p.



