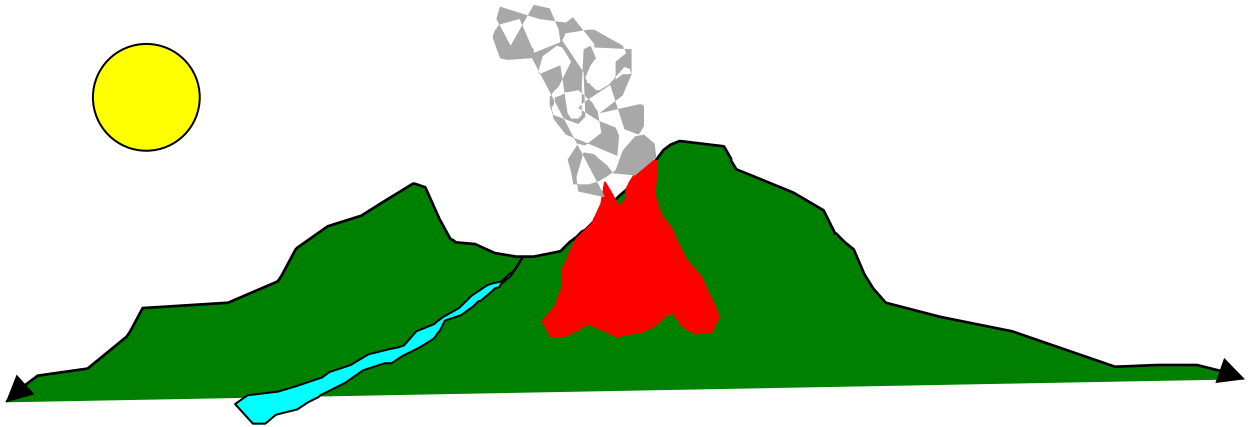


FIRE IN THE MOUNTAINS

Analysis of Historical Fires for Bandelier National Monument, Santa Fe National Forest and Surrounding Areas 1909 through 1996



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Introduction

This historical overview of fires in the Jemez and southern Sangre de Cristo Mountains is the most complete collection of fire data ever collected for these areas to date. Nevertheless, as the fires that burned every year in these mountains obscured the clear air of the southwest, the fire data presented here is also somewhat obscured by a variety of factors. Specifically, The path from the actual fire to this database is filled with multiple filters in which each step has gradually but surely obscured the data until the current information is only a “probable reconstruction” of the past fire event. For example, to even have been recorded a fire first had to be spotted.

Database Information

1). Database:

a) MICROSOFT ACCESS - d:\firehist\fires.mdb. Within fires.mdb the main database table is “**Fires**”.

b) Also note the table “**Fires: additional data for ‘59 to ‘69 fires**”. This table contains data that was available from Forest Service data sheets which, unfortunately, could not be tied in with fires from the same time period plotted from maps. See below for more information.

c) All other tables and queries in the fires.mdb database are for data analysis/queries only. They hold no additional data.

2) Graphics: MICROSOFT EXCEL 7.0 - d:\firehist\firexxx.xls (the graphs have the specific file name in the bottom left hand corner.

3) Text: MICROSOFT WORD 7.0c - d:\firehist\FireDoc.doc

Data Sources

The information for the database came from 3 general sources which can be divided into 2 groups based on time periods:

1). 1909 to 1969 Fires

These fires are from the “Fire Atlas” books from Santa Fe National Forest. These are the original maps and, when available, original information sheets which give details about the fires. The three principle books of interest are:

a). “Fire Studies/Fire Atlas #1”: This book has a faded blue cover. There are two “Fire Studies” tags on the cover. One in the center and one in the lower left hand corner. Also “Fire Atlas #1” is written in black marker at the top of the cover. Data from this volume is identified as “FS-x” in our records. See appendix I for more detailed information on maps in this volume.

b) “Fire Atlas”: This book has a brown paper-like cover material and a faded yellow/gold binding. The title is taped onto the cover at the center of the book. Data from this volume is identified as “FA-x” in our records. See appendix I for more detailed information on maps in this volume.

c) "Records on Fires - 1959 to": This book contains the data sheets (no maps) for fires from 1959 to 1970. Data from all years except 1970 were recorded. (1970 data was collected from the Forest Service database noted below). Unfortunately, fires plotted from the maps in the two volumes noted above and the fire information in this data book cannot be matched up. Thus, data from the maps is in the main "Fires" table while data from this volume is in an additional table: **"Fires: additional data for '59 to '69 fires"**. The important data differences between the two tables are as follows:

	TABLE	
Important Data Differences	Fires	Fires: Additional data for '59-'69 fires
Data Source:	historical Forest Service maps in the fire atlas volumes	historical Forest Service data sheets from "Records on Fires..."
Mapping:	Contains fire locations plotted from maps	No mappable fire locations
Fire Date:	Fire is dated to year only	Fire is dated to year, month, day
Size Class:	Size class unknown for many fires	Size class known for all fires
Fire Cause:	Fire cause unknown for many fires	Fire cause known for all fires
Acreage:	Acres burned is unknown for almost all fires	Acres burned is unknown for "A" size class, but known for most "B" and larger size class fires. Where acres burned were not known they have been estimated. See below for more information.

Obviously for mapping/GIS purposes the data from the "Fires" table will be used. However, for graphing and any statistical analysis the data from "Fires: additional data for '59-69 fires" will be used as more information is available in this table. Also, the "additional data" table has slightly more fires than those mapped from the historical maps. Finally, 1970 fire records were not gathered from this source as they are available from the following source.

2). 1970 - 1995 fires

1995 fires are from the Santa Fe National Forest (SFNF) - Interagency Fire Dispatch Office computer records. 1970 - 1994 years are from the Forest Service database in Kansas City, Kansas and were extracted using a "FLGIS2" query in the KCFast databank. This returns all the information needed for our database including the fire location. Note, however, fires from this period have a variety of location units. The following table details the original location units and the methods used to convert them to decimal degrees (a unit which can be used in ARC/VIEW and ARC/INFO).

YEAR	Data Source	Legals (T,R, Sec)	Original Latitude and Longitude	Decimal degree latitude and longitude	UTM coordinates
1970-1985	Forest Service - Kansas City	Yes, in data source	No, not in data source	Legals converted to decimal degrees	No, not in data source

	database			using Forest Service "CONVERT" program	UTM's calculated from decimal degree lat/long in ARC/INFO using the project command*
1986- 1994	Forest Service - Kansas City database	No, not in data source	Yes, in data source Degrees-minutes- seconds i.e.- 35.4345	Original Lat. and Long. converted to decimal degrees by using the formula: Decimal degrees = degrees + minutes/60 + seconds/3600	No, not in data source UTM's calculated from decimal degree lat/long in ARC/INFO using the project command*
1995, 1996	Supervisor's Office Santa Fe National Forest - Interagency Fire Dispatch Office	Yes, in data source	Yes, in data source Degrees-minutes- decimal seconds i.e. - 35.439 or 35 43.9	Legals converted to decimal degrees i.e.- 35.7275 using Forest Service "CONVRT" program	No, not in data source UTM's calculated from decimal degree lat/long in ARC/INFO using the project command*

* see appendix ? for more information on this process.

Field (Column) Information for the "Fires" Table

1). **Unique Fire #:** This is the fire identifier FOR MAPPED FIRES in the form of xx.xxx where the first two numbers represent the year and the numbers after the decimal place represent the fire number (usually the order in which it was mapped but this is not true for all years). For example 23.010 is the 10th fire mapped in 1923. However, there are the following problems and exceptions:

a). The "Unique Fire Number" of fires remapped onto the mylar sheets from the original fire atlases (i.e. fires from 1909 to 1969) differ slightly from those in the database in the following manner:

Unique Fire Number on Mylar :

9.1
9.10
23.01
23.10
23.100
67.123

Unique Fire Number in database:

09.001
09.010
23.001
23.010
23.100
67.123

That is, the database/GIS mapping will have the Unique Fire # with the zeros as noted above while the mylar used for remapping and digitizing may or may not have these zero's. Nevertheless, the two can be still be easily cross-referenced despite these differences.

b). Some fires have a 4 number year as in 2130.xxx. These are fires that occurred between 1921 and 1930 (or whatever the numbers are) but are not datable to any one year. There are 4 occurrences or time periods where this occurs. Each has special "problems" that may be worth knowing about:

i) 2130 - There are 3 fires in this time period. When they were first remapped onto the base maps/mylar they were given the number 21.xx+ (where the + meant they were in the period 1921-1930). Thus the base maps/mylar will have fire 21.08+, 21.09+, and 21.10+. In the database, and thus for all subsequent GIS maps the number has been changed to 2130.08, 2130.09, and 2130.10.

ii) 3139 - There is only one undatable fire in this time period which is numbered on the mylar as 31.02+. In the database, and thus for all subsequent GIS maps the number has been changed to 3139.02.

iii) 4647 - There are many undatable fires in this time period. See the "**Problems with Specific Time Period**" section below on for specific information. By an elimination process it was possible to place some human caused fires in this time period. Note, however, they were originally remapped onto the mylars using the code 01.xxx or 0001.xx. This has been changed in the database, and thus all subsequent GIS maps, to 4647.xx.

iiii) 4658 - These are lighting fires between 1946 and 1958. They were originally mapped onto the mylars using the code 0000.xx or 00.xx. This has been changed in the database, and thus all subsequent GIS maps, to 4658.xx.

c). Some fires were given the same "Unique Fire Number". This occurred on a single mylar (i.e. two fires might be labeled 55.67) and across mylars (i.e there might be a 65.77 on one mylar and another 65.77 on another mylar). These fires were treated as follows:

1). If both fires had associated data recorded (date, fire size, cause, etc...) in the database and they were distinguishable by location they were given a letter ending:

34.45a (= we know this is fire 34.45a and that it was x acres from x cause, etc.)

34.45b (= we know this is fire 34.45b and that it was y acres from y cause, etc.)

2). If only one fire had associated data recorded in the database and its location was known it was given an "a" letter extension. The other fire which did not have associated data recorded in the database was given an "x":

66.78a (= we know this is fire 66.78a and that it was x acres from x cause, etc)

66.78xb (= known location but unknown data)

3). If the fires could not be associated with any data or definitively assigned to a known location, they were given "x"s:

18.44xa (= yes, there was a fire 18.44x at this location but we didn't record the data for it. **Or**, there was a fire 18.44x which we recorded data for BUT we also recorded 18.44x at another location so we can't tell to which fire the data belongs.)

18.44xb

This may occur in a couple different cases:

a). there may be multiple fires with identical labels and associated data (which may or may not be different) but the data cannot be assigned definitively to either fire.

b). there may be multiple fires with identical labels and no data. That is, the fires were at that location but the associated data was not recorded into the database.

d). 1970 to 1994: The fire numbers for this time period match the fire number provided in the Forest Service/Kansas City database. Note that 1995 is not included here as it had not yet been entered into the Kansas City records. Fire numbers for 1995 were assigned randomly as they were added to this database. That is, 1995 fire numbers do not match Forest Service records.

2). Record #: This was originally meant to be a count but...

a). Numbers 450 to 500 are missing due to a data entry error (#449 was entered and then #500 on the original paper data sheets).

b). Record numbers entered manually for fires remapped from the original Forest Service maps end at 3449 (fire 65.01, though the record numbers actually go through 1969).

c). 1970 to 1994 record numbers are actually the unique fire numbers from the Forest Service/Kansas City database. This number will be useful if more information is needed about fires from that time period.

d). 1995 fires use the "grouped" fire ID numbers. That is, 00000000 which is 00/00/00/00 and represents the fire ID number for the region/forest/district id/Supervisor's Office Fire number. This numbering system was used for convenience only though it will be helpful if one needs to refer back to the original Forest Service reports.

3). Fire Date: Date of the fire in the form YYYY-MM-DD. In many cases the month (MM) and day (DD) are not known.

4). Fire Number: This is identical to the second half of the Unique Fire # (see above) but minus the zeros. I have left it in the table in case it may be useful in the future. Otherwise it has no purpose.

5). Source Map: See the "Data Sources" section for information

6). Size Class: where

A - up to .25 acres

B - .26 to 9.99 acre

C - 10 to 99.99 acres

D - 100 to 299.99 acres

E - 300 to 999.99 acres

F - 1000 to 4999.99 acres

G - 5000 acres or greater

X - size class not known

AB - Some fires for 1946 - 1947 period (see 4647.xx fires) are classed as AB fires. (i.e. the fires may be A or B fires but it is not possible to tell the correct category for the fire).

Note that for 1970 to 1994 Forest Service/Kansas City records, some fires were incorrectly size classed in the original records and this has been corrected. However, the corrections have not been noted in the "Old Size Class" field below.

7). Old Size Class: Some historical fires were recorded before the current size class categories had been developed. Where acreages are known or fires outlined on historical maps are clearly larger than the original size class stated the size class has been changed to reflect the acreage burned or the acreage estimated from the outline on the maps. This applies to fires from 1909 to 1969 only.

8). Acreage: Entered only when known. No estimates have been made.

9). UTM Easting: Fires from 1909 through 1969 were remapped from the original maps onto mylar overlaying current topo maps for the area (most at the 1:100,000 scale). The mylars were then digitized at the NPS GIS center in Albuquerque.

Fires from 1970 through 1994 were extracted from the Forest Service database in Kansas City, Kansas and using a "FLGIS2" query in the KCFAST databank. This returned all the information needed for our database including the fire location. Note, however, that 1970 - 1985 fires are returned with the legal location (township, range, section) only. These were converted to latitude and longitude using the CONVRT program. Fires from 1986 to 1994 already have the lat. and long. Lat and Long for 1995 fires are from the Santa Fe National Forest (SFNF) - Interagency Fire Dispatch Office computer records. (See appendix II for more information on these sources/programs and contacts). Latitude and Longitude was then converted to UTM's in ACR/INFO.

10). UTM Northing: See # 9 above.

11). Location Precision:

S - Seconds; accuracy of fire mapped to within a 3-second radius, i.e. within 0.1 miles.

M - Minutes; accuracy of fire mapped within one minute radius, i.e. within 1.5 miles.

G - General; accuracy of fire mapped within 5 miles.

U - Unmappable; due to incomplete, inaccurate, or contradictory information.

12). Fire Cause: Fire cause is divided into 6 general categories. These categories are distinct in that there is no question about assigning a cause in these categories:

MIF- management ignited fire

L - lightning

X - unknown cause; i.e. no cause stated or recorded in the records

U - declared unknown cause; i.e. stated in the records as such

PX - person-caused, unknown cause; i.e. known to be person caused but exact cause not stated or recorded in the records.

PU - person-cause, declared unknown cause; i.e. known to be person caused but exact cause unknown AND stated in the records as such.

P - Person-caused.

This category is further subdivided into multiple categories. However, these categories are not clearcut. For instance, one category is "MH" or "person-caused/herders or stockmen" but the records don't state if they caused the fire by smoking or a campfire or spontaneous combustion of their sheep. Also problematic is "MB" or "person-cause/brush burning". Some early fires were recorded under this category but some later fires were noted as "debris burning". What type of debris were they burning - brush or trash? Should fires noted as debris burning be in the "MB" category or "MO" (person-cause/other) category. Finally, new types of person caused fires, such as power-line caused, "harvesting equipment", etc. occurred in the later part of this period and would need their own separate category. The important point is that anyone wishing to further study person-caused fires should carefully review (and most likely revise) the subcategories of person-caused fires. The person-caused subcategories used in our database are as follows:

PB - Brush burning

PC - Camping

PF - Residence/Flue Fire

PH - Herders or stockmen

PI - Incendiary

PL - Lumbering

PM - Mining

PO - Other

PS - Smoking

PSM - Sawmill

13). Mylar Name: This is the name of the mylar onto which the fire was remapped in the form AA.x. For example SF.1 which is the Santa Fe quad, mylar # 1.

14). Remarks

15). FS Statistical Cause: This is the Forest Service cause codes and are used on fires from 1970 on. The codes are:

1 - Lightning

2 - Equipment Use

3 - Smoking

4 - Campfire

5 - Debris burning

6 - Railroad

7 - Arson

8 - Children

9 - Miscellaneous

16). Lat: Latitude. see #9 (UTM Easting) above for more information.

17). Long: Longitude. see #9 (UTM Easting) above for more information.

18). Township: see #9 (UTM Easting) above for more information.

19). Range: see #9 (UTM Easting) above for more information.

20). Section: see #9 (UTM Easting) above for more information.

21). FS Fire Name: All Forest Service fire names are included for 1995 fires. Some fires from 1959 through 1969 are identified by name. These were named in order to identify the larger fires of this time period and map them (recall that there are two separate data tables for this time period. One with mappable fires and the other with more information on each fire but unmappable fires).

Problems with Specific Time Periods

As will be discussed in the data analysis there are a number of problems with the data and its interpretation. These range from inaccurate maps, inaccurate mapping, and missing data to changes in forest infrastructure and firefighting methods which have influenced fire size and number. These type of influences and considerations will be discussed in the data presentation and analysis section. There are, however, specific time periods which have sections of missing data. These are:

1941, 1943 - 1945: All person-caused fires missing. There were no maps available for person-caused fires in this time period.

1946, 1947: All fires missing.

1948 to 1958: Year and size class of all lightning fires unknown. Also size classes of person-caused fires in 1948 are missing.

Field (Column) Information for the "Fires: additional data for '59 to '69 fires" Table

As noted in the table above the critical difference between the two tables ("Fires" and "Fires: additional data...") is that for the period 1959 to 1969 the "Fires" table has mappable fires from the historical maps

while the second table has unmappable fires for this period but more data on the fires. This table has the following fields:

- 1). FS SO ID: This is the Forest Service (FS) Supervisor's Office ID number.
- 2). FS Fire Name: Some names were difficult to read due to the handwriting. These were interpreted where possible and given "???" to show they might not be correct.
- 3). FS Ranger District.
- 5). FS Fire Date: In the form YYYY-MM-DD (as in the main "Fires" table).
- 6). FS Size Class: Same as noted above for the size class in the main "Fires" table.
- 7). FS Cause. As noted above
- 8). FS acres: The acres burned is known for most "B" size class fires and larger. Note that for analysis purposes **all** "A" size class fires (in this table only) were estimate at 0.1 acre. Where acres burned for larger size classes was not recorded it was estimated based on the average number of acres burned for that size class over the whole 10 year period. The average fire size for all known "B" size class fires is 2.16 acres (n = 190 fires). This estimate has been applied to 39 of 229 "B" size class fires (17% of all "B" fires). The average fire size for all known "C" size class fires is 30.91 acres (n = 21). This estimate has been applied to 4 of 25 "C" size class fires (19%). When the acres burned is estimated it is noted in the remarks column.
- 9). Remarks.

Note that this table does not have the following fields:

- a) Unique Fire Number: There is NO unique fire number as these fires are not mapped. Unique fire numbers are for mapped fires only.
- b). Record # :

Appendix I: Indices for the Santa Fe National Forest Fire Atlases

Appendix II: Contacts for the historical fire research

I). Contacts:

John Romero or Epifanio Abeyta ("Epi")
Santa Fe National Forest
Interagency Fire Dispatch
Pinon Building, 1st Floor
Santa Fe, NM
505-438-7800

* These are the people to contact for the historical maps and data sheets for Santa Fe National Forest. In addition, they have access to the Kansas City database of fires (from 1970 to the present) and can query this database from their computers. John Romero also gave me the CAN program which converts township, range, and section to latitude and longitude (or visa versa). Unfortunately, the CAN program only does one conversion at a time. See the CONVRT program under Milford Suida's name below.

Dan Winter
(Regional Fire Manager)
Forest Service SW Regional Office
517 Gold Ave., S.W.
Albuquerque, NM 87102
505-842-3352

* recommended that I talk to Delven Bunton, FS Computer Systems in Boise, ID (see below)
* put me in contact with Martin Martinez, (Dan's assistant as the Regional Planner/Fire Management) (see below also).
* also gave me Andrea Wojtasek's name (see below).

Martin Martinez
Fire Management/Regional Planner
Cibola National Forest
2113 Osuna Rd., N.E., Suite A
Albuquerque, NM 87113-1001
505-761-4650
fax: 761-4663

* Regional planner/fire management and assistant to Dan Winter (above). Martin works with the PCHA program which uses historical fire periods (from 1970 to the present) to plan fire budgets for the forest. While an interesting program, PCHA needs extensive inputs from weather data and fuel models to produce its output. Graphing is limited to two graphs and thus is not very useful for this analysis. However, Martin (and Dan) are very helpful and may be able to help with other questions or problems.

Delven Bunton
FS Computer Systems Group
National Interagency Fire Center
3833 S. Development
Boise, ID 83715
208-387-5283

* Expert on Forest Service Databases and computer systems; especially with the Historical Fire database in Kansas City. Also works with the Forest Service Fire Analysis program (called PCHA. However, it did not prove very useful for this work).

Milford Suida
Coconino National Forest
2323 E. Greenlaw Lane
Flagstaff, AZ 86004
520-527-3600

* Milford sent me the CONVRT program which converts whole files of township, range, and section to lat/long or visa versa. Call him if you have questions on CAN or CONVRT.

Andrea Wojtasek
Fire Management and Aviation
Bldg. 2 SW
USDA-Forest Service
P.O Box 96090
Washington D.C. 20090-6090
202-205-1486

- has historical summaries of fire history by forest for all years. Talked to her on 5/17/96. She agreed to send me the fire histories as she has time. Sent her a letter 5/20/96. Called her again in mid-June. She said she is still thinking of me (i.e. she has my letter) but "it's a very busy fire season".
- Also called her on the following dates:
 - 9/12/96 - still nothing from her.
 - 10/29/96 left message
 - 11/12/96 left message
 - 11/21/96 left message (the last one!)

Milford Fletcher
Director,...

Albuquerque, NM ...
505-766-8400

- fires from 1909 to 1969 which were transferred from the original maps to mylar overlaying 1:100,00 topographic quads were digitized in this office.

Appendix III - Coordinate location Conversions

1). Legal (Township, Range, and Section) data to decimal degree latitude and longitude:

- There are two programs which were written by Forest Service personnel which can do this conversion (in either direction - i.e. latitude and longitude to legal locations too.)
 - CAN will convert one legal location at a time. See c:\david\firehist directory in the ecology office computer at Bandelier National Monument.
 - CONVERT will convert a file of legal locations to lat/long or visa versa. See c:\david\firehist directory in the ecology office at Bandelier National Monument.

2) Conversion of different forms of latitude and longitude to decimal degree latitude and longitude:

<i>Starting latitude and longitude</i>	<i>Use this formula to convert to decimal degree latitude and longitude</i>
<i>degrees minutes seconds (i.e. - 36 23 30)</i>	Decimal Degrees = degrees + minutes/60 + seconds/3600
<i>degrees minutes decimal seconds (i.e. - 36 23.5)</i>	Decimal Degrees = degrees + minutes/60 +

	(decimal seconds * 60/3600) (i.e. 36+23/60+(.5*60/3600)
--	--

3) Conversion of Decimal degree latitude and longitude to UTM coordinates:

This is a bit more complicated as it involves 3 computer programs. We start by assuming you have a database (ACCESS in this case) with decimal degree latitude and longitude.

- a) Query the ACCESS table for longitude latitude. Note however;
 - Longitude must be first
 - Longitude must be negative (-); for example:

Longitude	Latitude	Fire Label
-106.3565	35.7856	1
-105.6744	35.7878	2
-106.9999	36.4554	3
-105.8976	36.0078	4

- b) Change the query to a "Make Table" query and then run it (see the hot button: !) to make a new table in your ACCESS database
- c) Go to your new table and change the design so that the longitude and latitude are both numbers with single fieldtypes (go to the table design view for this step).
- d) Export the table to a .dbf file
- e) If you are not working on a computer that has the program "Dbase" then you'll have to move your file (.dbf) and yourself to a computer that does have dbase.
 - Note: the reason we need to use dbase at this time is that we need the table that was created above to be in a delimited text file (often seen with the extension .txt). Unfortunately, ACCESS does not seem able to export to a delimited text file without truncating the information in the table. (When the information is truncated ARC/INFO cannot calculate the UTM coordinates). Maybe there is a way around this export problem but I haven't found it yet. If the information could be directly exported to ARC/INFO from ACCESS it would sure make the whole process easier.
- f) On the computer with "Dbase" perform the following steps:
 - Go to the drive and directory which contains your .dbf file
 - at the prompt type "Dbase" to open up the dbase program
 - enter
 - arrow over to "tools"
 - enter - the highlighted bar will be on "tools" and under the tools menu "set drive" will be highlighted.
 - arrow to "D" (or wherever your .dbf file is located)
 - enter
 - arrow over to "Set up" - the highlighted bar will be on "set up" and under the set up menu "database file" will be highlighted.
 - enter - the drive where your file is located should now be highlighted.
 - enter
 - arrow to your file (if it doesn't show up it is because it may be missing the .dbf extension or you may have designated the incorrect drive or directory).
 - enter
 - "is the file indexed" question will appear - ignore it hit the enter key.

- If you want to look at the file do the following:
 - arrow over to "Update"
 - arrow down to "browse"
 - enter
 - to return, hit escape
 - if at any time you lose the file and the menu at the top of the screen, type "assist" and the period (.) For example: .assist
- Otherwise:
 - escape
 - escape
 - from the prompt (which is a period (.)) type the following: . copy to (your file name) delimited with blank
 - your file should now be your file name.txt.
- to quit Dbase type quit at the prompt (.)

g) Now you are done with Dbase and need to open up ARC/INFO (the ARC program is on Kay's computer in the Ecology office)

h) Briefly, in ARC/INFO use the following commands

- PROJECT
 - specifically: PROJECT FILE YOURFILENAME NEWFILENAME (dd-ntm.txt)
 - You will be prompted for a series of inputs. Type in the following:

```

input
projection geographic
units dd
parameters
output
projection utm
units meters
zone 13
parameters
end

```

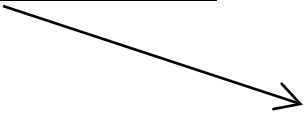
Note, however, that the above commands should only be used to convert decimal degree (dd) latitude and longitude to UTM's in zone 13. If your latitude and longitude are in degrees minutes seconds (DD MM SS), the dd should be replaced with dms. See ARC/INFO for more information.

- i) This will output NEWFILENAME with the UTM coordinates. Note however the original decimal degree latitude and longitude as well as the labels will not be preserved in this output file!!
- j) Go back to ACCESS and import the NEWFILENAME. Remember since the labels have been lost do not change the order of the data in either the original table from which you began or this imported table.
- k) Copy the UTM coordinates from the recently imported file to the original table which contains the data (this assumes you have two fields into which you can copy this data. If not, you'll have to make these fields. I.e.-

Copy this data:

398343.34	4532456.78
387876.98	4245678.89
398567.66	4445672.98
387967.66	3999999.99

To your original table:



Fire label	Fire date	UTM EAST	UTM NORTH	Acres
1	1996			34
2	1996			.1
3	1995			.2
4	1994			156

And you're finally done!!!