

Department of
Forest Science



Corvallis, Oregon 97331-5704

(503) 754-2244

MEMO TO: LTER Data Management Workshop Attendees
FROM: Susan Stafford *Susan*
SUBJECT: LTER Data Management Workshop Material
DATE: May 9, 1984

Here at long last are some of the items we promised to send to you. Enclosed are:

1. LTER Data Managers and Principal Investigators: addresses and phone numbers.
2. Attendees Data Management Workshop, Corvallis, Oregon, November, 1983.
3. Communication chain letter.
4. Central Plains Data Management Report.

Still to come are the working group reports. Several of the working group leaders will be attending the All Scientist's Meeting in Lake Itasca next week. We hope to finalize our reports and distribute them shortly thereafter.

Also, most of the Editorial Board for the November Data Management Symposium will be attending the Minnesota meeting. We will be discussing and making further plans for the Symposium. Bill Michener and Marvin Marozas will keep you informed about this.

Sorry for the delay on the enclosed material. If you have any questions, please don't hesitate to contact me.

SS:ts

Enclosures: 4

Attendees

LTERR Data Managers Workshop

Corvallis, Oregon - November 6-9, 1983

Name	Site	Mailing Address	Phone
Alaback, Paul	Andrews	Dept. Forest Science Oregon State University Corvallis, OR 97331	503-754-2244
Baker, Van	Pawnee/Shortgrass	Natural Resource Ecol. Lab Colorado State University Ft. Collins, CO 80523	303-491-5642
Bowser, Carl	Northern Lakes	Dept. Geology/Geophysics University of Wisconsin 1215 W. Dayton Madison, WI 53706	608-262-8955 608-262-8960 608-262-3014
Conley, Walt	Jornada	Box 4901 New Mexico State University Las Cruces, NM 88003	505-646-2541
Dyer, Mel	Oak Ridge National Lab	Environmental Sciences Division Oak Ridge National Lab Oak Ridge, TN 37830	615-574-7847
Freeman, Bud	Okefenokee Swamp	Institute of Ecology University of Georgia Athens, GA 30602	404-542-2968
Gorentz, John	W. K. Kellogg Biological Station	3700 East Gull Lake Drive Hickory Corners, MI 49060	616-671-5117
Gurtz, Marty	Konza Prairie	Division of Biology Kansas State University Manhattan, KS 66506	913-532-6629
Halfpenny, Jim	NIWOT Ridge	Mt. Research Station Nederland, CO 80466	303-492-8841
Henshaw, Don	Forest Service/ Andrews	Forest Science Laboratory 3200 Jefferson Way Corvallis, OR 97331	503-757-4393
Kearns, Daniel	Coweeta/Okefenokee Swamp	Institute of Ecology University of Georgia Athens, GA 30602	404-542-2968
Klopsch, Mark	Andrews	Dept. of Forest Science Oregon State University Corvallis, OR 97331	503-757-4427

<u>Name</u>	<u>Site</u>	<u>Mailing Address</u>	<u>Phone</u>
Komarkova, Vera	NIWOT Ridge	Instaar, Box 450 University of Colorado Boulder, CO 80309	303-492-5494
Lubinski, Ken	Large Rivers	Box 2221 Grafton, IL 62037	618-786-3317
Ludwig, John	Jornada	Biology Department New Mexico State University Las Cruces, NM 88003	505-646-3933
Marozas, Marvin	North Inlet	Baruch Marine Lab P.O. Box 1630 Georgetown, SC 29442	803-546-5219 803-546-3623
Marzolf, Dick	Konza Prairie	Division of Biology Kansas State University Manhattan, KS 66506	913-532-6643
Michener, William	North Inlet	Baruch Marine Lab P.O. Box 1630 Georgetown, SC 29442	803-546-6219 803-546-3623
Reynolds, Barbara	Northern Lakes	Center for Limnology University of Wisconsin Madison, WI 53706	608-262-3088
Sinclair, Bob	Large Rivers	605 E. Springfield Champaign, IL 61820	217-333-4952
Slagle, Rod	Andrews	Dept. of Forest Science Oregon State University Corvallis, OR 97331	503-754-2244
Stafford, Susan	Andrews	Dept. of Forest Science Oregon State University Corvallis, OR 97331	503-754-2244
Waddell, Karen	Andrews	Dept. of Forest Science Oregon State University Corvallis, OR 97331	503-754-2244
Zinnel, Kathlean	Cedar Creek	317-Zoology 218 Church Street SE Minneapolis, MN 55455	612-373-5913

**LTERR Data Managers
and Principal Investigators**

<u>Site</u>	<u>Name</u>	<u>Mailing Address</u>	<u>Phone</u>
<u>Andrews</u>			
Data Managers	Susan Stafford Paul Alaback	Dept. Forest Science Oregon State University Corvallis, OR 97331	503-754-2244
PI most responsible for data management	Dick Waring Jerry Franklin	Forest Science Laboratory 3200 Jefferson Way Corvallis, OR 97331	503-754-2244 503-757-4362
<u>Cedar Creek</u>			
Data Manager	Kathlean C. Zinnel	317-Zoology 318 Church Street SE Minneapolis, MN 55455	612-373-5913
PI most responsible for data management	John R. Tester	305-Zoology 318 Church Street SE Minneapolis, MN 55455	612-373-5646
<u>Coweeta</u>			
Data Manager	Daniel Kearns	Institute of Ecology University of Georgia Athens, GA 30602	404-542-2968
PI most responsible for data management	D. A. Crossley Jr.	Dept. of Entomology University of Georgia Athens, GA 30602	404-542-2968
<u>Illinois Rivers/Large Rivers</u>			
Data Manager	Robert A. Sinclair	Illinois State Water Survey 605 E. Springfield Champaign, IL 61820	217-333-4952
PI most responsible for data management	Ken Lubinski	P.O. Box 221 Grafton, IL 52037	618-786-3317
<u>Jornada</u>			
Data Manager	Walt Conley	P.O. Box 4901 New Mexico State University Las Cruces, NM 88003	505-646-2541
PI most responsible for data management	Walt Conley John Ludwig	P.O. Box 4901 New Mexico State University Las Cruces, NM 88003	505-646-2541

<u>Site</u>	<u>Name</u>	<u>Mailing Address</u>	<u>Phone</u>
<u>Konza Prairie</u>			
Data Manager	Mary Gurtz	Division of Biology Kansas State University Manhattan, KS 66506	913-532-6629
PI most responsible for data management	Dick Marzolf	Division of Biology Kansas State University Manhattan, KS 66506	913-532-6643
<u>Niwot Ridge</u>			
Data Manager	Jeff Osborn	c/o Komarkova Instaar, Box 450 University of Colorado Boulder, CO 80309	303-492-5494
PI most responsible for data management	Vera Komarkova	Instaar, Box 450 University of Colorado Boulder, Colorado 80309	303-492-5494
<u>North Inlet/Baruch Marine Lab/Hobcaw</u>			
Data Managers	Marvin Marozas William Michener	Baruch Marine Lab P.O. Box 1630 Georgetown, SC 29442	803-546-6219 803-546-3623
PI most responsible for data management	Elizabeth Blood	Baruch Marine Lab P.O. Box 1630 Georgetown, SC 29442	803-546-6219
<u>Northern Lakes</u>			
Data Manager	Barbara Reynolds	Center for Limnology University of Wisconsin Madison, WI 53706	608-262-3088 608-221-9375
PI most responsible for data management	Carl Bowser	Dept. of Geology & Geophysics University of Wisconsin 1215 W. Dayton Madison, WI 53706	608-262-8955 608-262-8960 608-262-3014
<u>Okefenokee</u>			
Data Manager	Daniel Kearns	Institute of Ecology University of Georgia Athens, GA 30602	404-542-2968
PI most responsible for data management	Jeroen Gerritsen	Institute of Ecology University of Georgia Athens, GA 30602	404-542-2968

<u>Site</u>	<u>Name</u>	<u>Mailing Address</u>	<u>Phone</u>
<u>Pawnee/Central Plains/Shortgrass</u>			
Data Manager	Van Baker	Natural Resource Ecol. Lab Colorado State University Ft. Collins, CO 80523	303-491-5642
PI most responsible for data management	Bill Lauenroth	Natural Resource Ecol. Lab Colorado State University Ft. Collins, CO 80523	303-491-5571

OTHER NON-SITE REPRESENTATIVES

Oak Ridge

Data Manager	Mike Ferrell	Oak Ridge National Laboratory Environmentrics Division Oak Ridge, TN 37380	615-574-7371
PI most responsible for data mangement	Mel Dyer	Oak Ridge National Laboratory Environmental Sciences Division Oak Ridge, TN 37380	615-574-7847

Kellogg Biological Station

Data Manager	John Gorentz	3700 East Gull Lake Drive Hickory Corners, MI 49060	616-671-5117
PI most responsible for data management	George Lauff	3700 East Gull Lake Drive Hickory Corners, MI 49060	616-671-5117

LTER DATA MANAGEMENT WORKSHOP

AGENDA

November 7-9, 1983

Monday: 11-7-83
 AM: FSL Large Conference Room
 PM: Peavy Arboretum

<u>Time</u>	<u>Activity</u>	<u>Responsible</u>
8:00- 8:30	Welcome Keynote Introductions Plans for Meeting	Susan Stafford Jerry Franklin All Carl Bowser/Susan Stafford
8:30-10:00	Site Reviews/Updates 10-15 min/site	All
	ANDREWS <i>OSU</i>	Paul Alaback
	CEDAR CREEK <i>U MINN</i>	Kathleen Zinnel
	COWEETA <i>N.C.</i>	Dan Kearns
	ILLINOIS RIVERS <i>UNIV OF ILLINOIS</i>	Bob Sinclair Ken Lubinsky
	JORNADA <i>NM N.MEXICO STATE</i>	Walt Conley John Ludwig
	KONZA PRAIRIE <i>Manhattan, KANSAS KSU</i>	Dick Marzolf Marty Gurtz
10:00-10:15	Break	
10:15-11:30	Site Reviews/Updates (continued)	
	NIWOT RIDGE <i>UNIV OF COLORADO</i>	Vera Komarkova Pat Weber Jim Halfpenny
	NORTH INLET/BARUCH <i>Georgetown MARINE LAB/HOBCEW J.S.CAROLINA</i>	Marv Marozas
10:15-11:30	NORTHERN LAKES <i>Madison, Wis VW</i>	Carl Bowser
	OKEFENOKEE <i>4. GEORGIA</i>	Bud Freeman
	PAWNEE/CENTRAL PLAINS	Van Baker

<u>Time</u>	<u>Activity</u>	<u>Responsible</u>
10:15-11:30	<u>Non-Site Reports</u>	
	OAK RIDGE	Mel Dyer
	KELLOGG BIOLOGICAL STATION <i>MSU E. Lansing</i>	John Gorentz
11:30-12:00	Working Groups Established	
	1. Cataloging/Documentation	Paul Alaback
	2. Applications of Data Management	Susan Stafford Walt Conley
12:00-12:30	Travel to Peavy Arboretum by Van	Karen Waddell Rod Slagle Mark Klopsch
12:30- 1:30	Lunch	
1:30- 4:00	Working Groups	
	1. Cataloging/Documentation	Paul Alaback
	2. Data Retrieval and Modeling	Susan Stafford
4:00- 6:30	General Discussion/Meeting as a whole	
	1. KBS Update	John Gorentz
	2. "Symposium on Computers and Statistics in Benthic Studies" at the North American Benthological Society Meeting, Raleigh, NC, May 23-25, 1984	Marty Gurtz
	3. Discussion and Planning for HOBCEW Symposium, Fall 1984	Bill Michener
	4. Consideration for Presentations at "All Scientists Meeting" at Itasca, Minnesota, Summer 1984	Carl Bowser Kathleen Zinnel Dick Marzolf

<u>Time</u>	<u>Activity</u>	<u>Responsible</u>
4:00- 6:30	5. LTER Continuation Grant Status	Dick Marzolf Jerry Franklin
	6. Other "Hot Topics"	All
6:30- 8:00	Dinner	
8:00-10:00	Working Group Discussions	
	1. Cataloging/Documentation	Paul Alaback
	2. Data Communications Among Sites	Walt Conley

Tuesday: 11-8-83

AM: FSL Large Conference Room

PM: FSL Computer Equipment Rooms (247, 249)

8:00-10:00	Working Group Presentations by Working Group Leaders and Group Discussion	
10:00-10:15	Break	
10:15-12:00	Working Group Presentations and Group Discussion (continued)	
	Final Discussion and Future Plans	All
12:00- 1:30	Lunch	
1:30- 5:30	"Show 'n Tell" Demonstrations and Tour of Database Facilities at Oregon State University	Paul Alaback Karen Waddell Mark Klopsch Rod Slagle
	Site Presentations of Software/ Hardware	Carl Bowser
	Social Free Time for Individual Discussions	
5:30	Transportation to Night Deposit Restaurant	Karen Waddell Rod Slagle Mark Klopsch
6:00- 7:00	"Happy Hour"	
7:00	Dinner	

Wednesday: 11-9-83
AM: FSL Large Conference Room

<u>Time</u>	<u>Activity</u>	<u>Responsible</u>
7:30-12:00	Meeting for Working Group Leaders and Interested Parties (Those <u>Not</u> Going on Field Trip) to Draft Minutes of Workshop, Recommendations, etc., for Later Distribution to PI's and Data Managers at Each Site	Carl Bowser Susan Stafford Paul Alaback Walt Conley
8:00- 5:00	H. J. Andrews Experimental Forest Field Trip	Art McKee Stan Gregory Ken Cummins

WORKING GROUPS

I. Cataloging/Documentation

Paul Alaback

A continuation of the process started last year to compare status of documentation and cataloging at each site and changes that might be considered in light of the past year's experience. Evaluation of progress toward preparation of abstracts of current projects at each LTER site.

II. Applications of Data Management

A. Data Retrieval and Modeling

Susan Stafford

Emphasis on mechanisms for serving the scientists' needs for database output and data manipulation/modeling from existing data. Discussion of statistical software tools; pros and cons of centralized data storage.

B. Data Communications Among Sites

Walt Conley

Means of data communication among sites, forms of data exchange, modem/tape/paper data exchange (data formats, file types, etc.). Discussion of means for long-term storage of data records.

Note: We combined the latter two topics into one working group to encourage maximum participation in both working groups. The working groups will meet twice on Monday (11-7) in the afternoon and evening to allow a representative from each site to participate in both working groups if desired.

PARTICIPANTS

<u>ILTER Sites</u>	<u>Name</u>
ANDREWS	Susan Stafford Paul Alaback Karen Waddell Mark Klopsch Rod Slagle
CEDAR CREEK	Kathleen Zinnel
COWEETA	Dan Kearns
ILLINOIS RIVERS	Bob Sinclair Ken Lubinsky
JORNADA	Walt Conley John Ludwig
KONZA PRAIRIE	Dick Marzolf Marty Gurtz
NIWOT RIDGE	Vera Komarkova Pat Weber Jim Halfpenny
NORTH INLET/BARUCH MARINE LAB/HOBCAW	Bill Michener Marv Marozas
NORTHERN LAKES	Carl Bowser Barb Reynolds
OKEFENOKEE	Bud Freeman
PAWNEE/CENTRAL PLAINS	Van Baker
<u>Non-Site Reports</u>	
OAK RIDGE	Mel Dyer
KELLOGG BIOLOGICAL STATION	John Gorentz

DATA RETRIEVAL AND MODELING

OBJECTIVE: To better serve scientists' needs for database output.

1. What is each site doing now and are we having problems? (i.e., emphasis on OUTPUT rather than INPUT, data managers as more than archivists, etc.)
2. What is each site doing in terms of modeling rather than only reporting data?
pattern recognition Fourier
3. Are there efficient ways to store data to save money but also facilitate analysis?
4. "System" needs to be both transparent (i.e., user friendly) and visible with "pay-back" to PI.

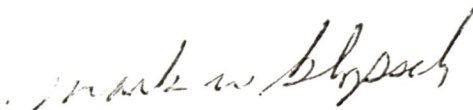
Dear Folks,

We are trying to put together a compilation of the communication possibilities between LTER sites. Four major communication methods present themselves: magnetic tapes, floppy disks, telecommunications, and information services (Source, Compu-serve, etc). Each method is best suited to particular types of situations and data. Previous discussions have established that all sites are capable of exchanging magnetic tapes. While tapes are useful for exchanging large datasets, the process is cumbersome and slow for exchanging small or frequently updated datasets. Floppy disks are often more convenient and easier to mail than tapes but disk sizes and formats vary widely. Telecommunications provides quick access but transfer rates are reasonably slow, costs can be high, and compatible protocols are necessary to assure data integrity. Information service networks could provide less expensive links for some sites and provide an electronic mail service making information exchange easier (essentially the same service could be provided by a shared account on any centrally located computer).

The primary concern at the meeting was to explore the problem of protocol telecommunications between sites. Due to the diversity of computers no single commercial package could be used at all sites. Commercial packages are available to allow protocol communication between most microcomputers. Programs using the xmodem protocol are available in the public domain for CP/M systems and the IBM-PC. Some companies such as mycroft labs sell communications packages such as MITE capable of using several formats (see enclosure). While we have not tested this package, it appears to provide access to the major formats used on a number of different microcomputers. If you are familiar with similar programs for your microcomputers please send information. The biggest problem will probably be to find protocols which can be used on minicomputers and mainframes. If necessary, it should be possible to write a communications program which could be implemented on all machines using simple text protocol such blocks of one line with a checksum included in the text at the end of the line. This would avoid the use of control characters which are treated inconsistently on different computers. Source could be provided in BASIC, Pascal, C, and FORTRAN so implementation would be comparatively simple.

To evaluate our options we will need a list of acceptable floppy disk formats, telecommunication parameters, telecommunication protocols, and available information networks. If possible return your information before the end of January. The HJA site information is provided as a guide. Additional ideas or comments would be greatly appreciated. The results will be compiled and sent to all sites. Thanks for you help.

Sincerely,



H. J. Andrews Communications

<u>Computer</u>	<u>Oper. Sys</u>	<u>Acceptable Disk Formats</u>		<u>Preferred/acceptable</u>
		<u>Disk</u>	<u>Formats</u>	
<u>Compupro</u>	<u>CP/M80-86</u>	<u>8"</u>	<u>DSDD Compupro</u>	<u>Preferred</u>
		<u>8"</u>	<u>SSSD Standard</u>	<u>Preferred</u>
<u>Columbia</u>	<u>MSDOS</u>	<u>5 1/4"</u>	<u>DSDD IBM-PC</u>	<u>acceptable</u>

Communications

<u>Computer</u>	<u>Baud</u>	<u>Dial out</u>	<u>Auto Answer Phone</u>	<u>data/Parity/Stop/duplex</u>	<u>Set up</u>	<u>Protocol</u>
<u>Cyber(mainframe)</u>	<u>1200</u>	<u>N</u>	<u>(503)754-3121</u>	<u>7</u>	<u>E 1 half</u>	<u>Datcom (local)</u>
<u>Cyber(mainframe)</u>	<u>300</u>	<u>N</u>	<u>(503)754-3781</u>	<u>8</u>	<u>N 2 half</u>	<u>Datcom (local)</u>
<u>Compupro</u>	<u>300/1200</u>	<u>Y</u>	<u>None</u>	<u>7</u>	<u>E 1 half</u>	<u>Datcom</u> <u>Xmodem*</u> <u>Clink/crosstalk*</u> <u>IBM-PC async*</u> <u>Hayes*</u>

* soon

Information Service Networks

No local connection

Special Communication Needs/Considerations

An FTS telephone is available for inexpensive "after hours" communications most places in the US.

MITE

MITE is the State Of The Art intelligent terminal and file transfer utility for CP/M. It is menu oriented, supports multiple protocols (MITE, XMODEM, CLINK, HAYES, etc.), and is available pre-installed (with *full* dynamic modem control in *all* versions) on a wide variety of systems. It is ideal for accessing virtually any asynchronous ASCII online system (e.g., the Source, Compuserve, many university computer systems), or for exchanging any CP/M file with a large number of other microcomputers, with error checking and recovery. Programmable macro strings are available, including support for fully automatic login on most systems. Auto-dial and auto-answer are supported (if present in hardware). Multi-file transfers (e.g. *.ASM) and remote command capability are now included.

There are several menus, which group the communications functions such that a novice user can ignore the more sophisticated features until they are ready for them. The Main Menu allows you to load or save the communications parameters (phone number, baud rate, parity, macro strings, etc.), initiate a call, await incoming calls, or branch to one of the other menus. Once the link has been initiated, it is possible to invoke the Main Menu with a single, (user defined) keystroke. Each menu option is selected by a single character (e.g., P to go to the Parameter Menu). It is possible to return to the Main Menu from any of the above menus with the X option.

The other menus are:

Parameter—Parity, Baud Rate, Phone #, etc.
Option—Trigger Characters, ANS/ORG, etc.
Text File Upload—Start upload, timing/handshaking
Text File Download—Capture on/off, Flow Control, etc.
Binary File Transfer—Select Protocol, Send, Receive
Macro String Definition—Check/define macro strings
Unwanted Character Filter—Select characters to be deleted from the incoming data
System Command Processor—DIR, ERA, REN, space available, etc.

The protocols currently supported include:

XMODEM—RCP/M systems, MODEM7, XMODEM, MODEM80, etc.
CLINK—CLINK, CROSSTALK, etc.
HAYES—HAYES Terminal Program
IBMPC—IBMPC Async Support Package

MITE has been carefully engineered to allow recovery from virtually any error the user may make, and to insure compatibility with as wide a variety of remote systems and data communications hardware as is possible. Anytime a file is created, the user is warned if there is already a file of that name, and allows him to abort that command. If he tries to exit to CP/M with a capture still in progress, that file will be

closed automatically to prevent loss of data. When he exits to CP/M, if a carrier is present, he is informed of this fact and given the option of disconnecting.

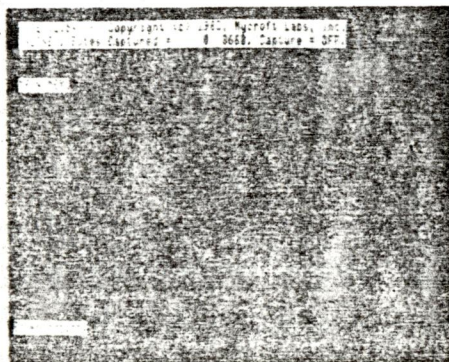
The only device dependent code in **MITE** is a module called a Communications Input/Output System (CIOS), that is similar in nature to a CP/M BIOS. It is included in source form with **MITE**, and has a jump vector at the beginning with several short subroutines that do various simple tasks, such as "set parity" or "check for carrier". Transporting **MITE** to new hardware involves writing a new CIOS, or modifying an existing one. This may be done with quite simple tools, such as ED and ASM. There is also an INSTALL program to select the console terminal type and load the HEX object file of the proper CIOS.

Four Mycroft Labs utilities are included with **MITE**:

TRSCPM—Convert TRSDOS text file(s) to CP/M format
COMHEX—Convert .COM file to Intel .HEX object format
E—Line numbered text editor for novice users
MFT—Multiple File Transfer for single drive systems

Dick Greenlaw's public domain text file compression utilities (SQ, USQ, TYPESQ, FLS) are included (with permission of the author) on the distribution disk, to save each user from having to download them before being able to make full use of the RCPM (Remote CP/M) systems around the country.

The manual is comprehensive and clearly written. It has detailed descriptions of each menu, typical procedures (creating a parameter file, etc.), and several tutorials (Introduction to Data Communications, RS-232 Interfacing, etc.).



Pre-installed CP/M-80 versions are now available for:

Access Matrix	KayPro II
Action 500	Lobo Max-80
Altos (5.25" or 8")	Micro Source
Apple II (Z80 and 80 column required) Hayes	Molecular
Micromodem II/Super	Monolithic Single Board
Serial / CCS 7710	Computer
Avatar (3R Computers)	Monroe OC 8820
Big Board	Morrow Micro Decision/
California Computer	Decision I / II / III
Systems 2710 / 2719	Northstar Advantage/
(S-100 card)	Horizon
Casio	Osborne I, Executive
CompuPro Systems	Otrona Attache
Support Card (S-100	Pacific Discon
card) Interfacer	Pied Piper (S-100 card)
1 / 2 / 3 / 4 (S-100	PMC Micro Mate
cards)	PMMI MM-103A (S-100
Cromemco	card)
DEC VT-180	Radio Shack Model III/
Digital Microsystems	Model 12
Fox	Sanyo MBC-1000 / 1100
Durango	MBC-1250 / MBC-2000
Eagle II, III, IV	Seattle Computer Pro-
Escort	ducts Multi-IO (S-100
Exxon 500, 510, 520	card)
Hayes Micromodem 100	Sierra Data Sciences
or 80-103A	ZS10 (S-100 card)
Imesai SI02-2	Zenith 89 / 90 / 100 /
Intercontinental Micro	110 / 120
Systems CPZ-48000	TS-801 / TS-803
(S-100 card)	Victor 3/4/2600/3005
Intertec Superbrain	Xerox 820, 820-II
IRIS	Zenith 89 / 90 / 100 /
Ithaca Intersystems	110 / 120
	Zorba/2000

CP/M-86 Versions are available for the IBMPC/XT, Dec Rainbow, Columbia MPC, Victor 9000 and others. Call (904) 385-1141 for information on other implementations.

Dealer and distributor enquiries are welcome. For further information, please contact:

The list price of **MITE** is \$150.00. The list price of **MITE/86** is \$195.00.

MYCROFT LABS INC

2639 Monroe Street, Suite B-188
Tallahassee, Florida 32303
Mailing: P.O. Box 6045
Tallahassee, Florida 32314
Telephone: (904) 385-1141

Dealer and distributor inquiries encouraged

Source ID: TCM495

CP/M is a trademark of Digital Research. MODEM80 is a trademark of The Alternate Source. CROSSTALK is a trademark of Microtel.

List of Pre-installed Versions of MITE and MITE/86
November 17, 1983

Access Matrix/Actrix
Action 500
Alspa
Altos (5.25" or 8")
Apple II (280 and 80 column req.)
 CCS/7710 / Hayes Micromodem II /
 Super Serial / ALS Dispatcher
Avatar (3R Computers)
Big Board
California Computer Systems 2710 /
 2718 / 2719 (S-100 card)
Casio
Challenge Systems 1000
Cifer
Colonial Data Systems
CompuPro Systems Support S-100 Card
 Interfacer 1 / 2 / 3 / 4 (S-100
 cards)
Cromemco
Data Point
DEC VT-180
Digital Microsystems Fox
Durango
Eagle II, III, IV
Epson QX-10
Escort
Exxon 500, 510, 520
Hayes Micromodem 100 or 80-103A
Imsai SI02-2
IMS International 740/861 Slave /
 480 Master
Intel Personal Development System
Intercolor 2000
Intercontinental Micro Systems
 CPZ-48000/Slave (S-100 card)
Intertec Superbrain
IRIS
Ithaca Intersystems
KayPro II / IV / X
Konan Octoplus
Lanier EZ-1
Lobo Max-80
Micro Source
Mirage
Molecular
Monolithic Single Board Computer
Monroe OC 8820
Morrow Micro Decision /
 Decision I / II / III

NEC 8801
Northstar Advantage / Horizon /
 HSIO-4 (S-100 Card)
Osborne I, Executive
Otrona Attache
Pacifica Discon
Paradise Systems Convertible
Pied Piper (S-100 card)
PMC Micro Mate
PMMI MM-103A (S-100 card)
QDP 100 / 300
Radio Shack II / IV / 12 / 16
Sanyo MBC-1000 / 1100 / 1150 /
 1200 / 1250 / 2000
Seattle Computer Products
 Multi-I/O (S-100 card)
Sierra Computer Systems
Sierra Data Sciences ZSIO
Sony
Technology International (TIC)
Teletec System Master
Televideo 801/ 802 / 803 / PORTABLE
Vector 3 / 4 / 2600 / 3005
Xerox 820, 820-II
Zenith 89 / 90 / 100 / 110 / 120 / H8
Zilog Development System
Zorba / Z2000

MITE/86 Versions

Columbia Data Products
Compaq
Corona
DEC Rainbow
Fujitsu
IBM-PC / XT
NEC APC
Seequa Chameleon
Televideo 1603
Victor 9000

Call (904) 385-1141 for other
implementations.