APPENDIX D. (Cont’d.)

* CLASS(16)/ ' 0-5', ' 6-10', '11-20', '21-30', '31-40',
* ' 41-50', ' 51-60', ' 61-70', ' 71-80', ' 81-90',
* ' 91-100', '101-110', '111-120', '121-130', '131-140',
* ' 141+' /

LOGICAL INAC, TSPEC(7), REPSW/.FALSE./

REAL COEFS(16,7,8,3), CAP(8), OPNRAT, C,
* UDAY(8) / 8.96, 24.68, .07, .42, 4*0./,
* RPVAL(8) / 2*17.85, 2*24.80, 4*0./,
* WFDAY(9), WFUDVA(9),
* ACARY(17,7,4) / 476*0./,
* TAC, DENS(8)

DIMENSION PT(999),AC(999),BD(999),MT(999),REGYR(999),BRNYR(999),
* THNYR(999),ACT(4)/4*0./,ACOP(999)

REAL DCOFT(7)/.013,.013,.009,.012,.012,.013,.013,.012/!
* DCOFB(7)/.022,.022,.016,.020,.022,.022,.020/. ! Deer thin
* TCOFT(7)/.002,.002,.002,.002,.002,.002,.002/. ! Turkey thin
* TCOFB(7)/.020,.020,.020,.020,.020,.020,.020/. ! burn
* SCOFT(7)/.037,.037,.000,.037,.037,.037,.037/. ! Squirrel thin
* SCOFB(7)/.000,.000,.000,.000,.000,.000,.000/. ! burn
* GCOFT(7)/.000,.150,.000,.150,.000,.150,.150/. ! Grouse thin
* GCOFB(7)/.000,.137,.000,.137,.000,.137,.137/ ! burn

C Define error messages
CHARACTER*25 ERR_1_2 / '<BEL> ERROR -- ENTER 1 OR 2 - '/
CHARACTER*25 ERR_N_Y / '<BEL> ERROR -- ENTER Y OR N - '/

kbd = 5 ! screen input
scr = 6 ! screen output
MAXAGE = 16 ! MAXIMUM AGE CLASS FOR COEFFICIENTS FROM DATA FILES.
IST = 1 ! Stand number.
lst = 12 ! listfile specified in CHHABCAP.CLI
coef = 1 ! file for coef's
TAC = 0 ! Total acres.
FLAG = 0
BUG = .FALSE. ! TRUE shows debugging information.

CALL TITLE ! Print title page to screen.

Write( *,1003)
1003 Format(/' Show detailed Debug information? (Y/N)' )
Read('*(A1)') ANS
IF (ANS.EQ.'Y' .OR. ANS.EQ.'y') BUG=.TRUE.

DO 2 I = 1, 9
   WFDAY(I) = 0.
   WFUDVA(I) = 0.
2 CONTINUE
APPENDIX D. (Cont’d.)

* This section reads the 16 coefficients for a forest type and species.*
* The coefficients are in a set of files in the same directory as the *
* program. The last two files 'bcoefs' and 'bcoefsbb' contain age- *
* dependent thinning and burning coefficients for browse.          *

WRITE (*., 776)
776 FORMAT('Reading coefficients for:')

DO 3, K = 1, 10
OPEN (UNIT=coef,FILE=CFILE(K))
IF (K .LE. 8) THEN
  S=K
  T=1
ELSE
  C The thinning and burning coeffs for browse are age dependent
  C and are stored in files just like regular species coefficients.
    S = 7               ! Species 7 is BROWSE
    T = K-7             ! Adjust treatment number to 2=thin, 3=burn.
ENDIF

WRITE (*., 777) K, CFILE(K), S, SPECIE(S), T, TMENT(T)
                    'Treatment (T): ', I2, ' ', A)

READ (coef,110) ((COEFS(I,J,S,T),I=1,16),J=1,7)
110 FORMAT(16F4.0)
IF (BUG) WRITE (*) 778 ((COEFS(I,J,S,T),I=1,16),J=1,7)
778 FORMAT(10F7.2)

CLOSE (coef)

3 CONTINUE
Call Pause

C When deer, turkey, squirrel and grouse are on thinned or burned
C acres their coefficients need to be augmented by these values.

DO 330 A= 1, MAXAGE ! AGE CLASS
DO 330 F= 1, 7    ! FOREST TYPE
DO 330 S= 1, 4    ! 1=DEER, 2=TURKEY, 3=SQUIRREL, 4=GROUSE.
DO 330 T = 2, 3   ! TREATMENT: 2=THIN, 3=BURN
  IF (S.EQ.1 .AND. T.EQ.2) COEFS(A,F,S,T)= DCOFT(F)
  IF (S.EQ.1 .AND. T.EQ.3) COEFS(A,F,S,T)= DCOFB(F)
  IF (S.EQ.2 .AND. T.EQ.2) COEFS(A,F,S,T)= TCOFT(F)
  IF (S.EQ.2 .AND. T.EQ.3) COEFS(A,F,S,T)= TCOFB(F)
  IF (S.EQ.3 .AND. T.EQ.2) COEFS(A,F,S,T)= SCOFT(F)
  IF (S.EQ.3 .AND. T.EQ.3) COEFS(A,F,S,T)= SCOFB(F)
  IF (S.EQ.4 .AND. T.EQ.2) COEFS(A,F,S,T)= GCOFT(F)
  IF (S.EQ.4 .AND. T.EQ.3) COEFS(A,F,S,T)= GCOFB(F)

41
APPENDIX D. (Cont’d.)

330 CONTINUE

********************************************************************
*                                                             *
*              Stand Description Input Section                 *
*                                                             *
********************************************************************

PRINT *,'<FF> Enter the area's name (to 24 characters).'
PRINT *,' This name must be a single word or several'
PRINT *,' words connected by underscores ('_')  - '    
READ (kbd,'(A24)') ANAREA

PRINT *,' Enter the featured species  - '     
READ (kbd,'(A14)') FTSPEC

PRINT *, ' Enter the minimum elevation in feet  - '  
READ *, ELEV

5 PRINT *, ' Enter the reporting year (yyyy) - '  
READ *, REPYR

PPFILE = ANAREA
IF(REPSW) GO TO 504 ! If this is a repeat run

C If the stand data has already been entered, don't reenter it.

PRINT *, ' Is your stand data in a file (Y/N)?  - '  
READ (kbd,101) ANS

IF(ANS.NE.'Y' .AND. ANS.NE.'N' .AND."
     ANS.NE.'y' .AND. ANS.NE.'n') THEN
   WRITE(6,*) ERR_N_Y
   GO TO 550
ENDIF

********************************************************************
*                                                             *
*              Stand Description Input Section                 *
*                                                             *
********************************************************************

IF (ANS .EQ.'Y' .OR. ANS.EQ.'y') THEN ! Stand is in Data File.
  FLAG = 1
  PRINT *,' Is the file name :  1) CISCnnn?'
  PRINT *,'  or 2) the area name?'
  PRINT *,
  WRITE(6,*) ' ENTER 1 OR 2 -- '

502 READ(kbd,'(I1)') REPLY

IF(REPLY.NE.1 .AND. REPLY.NE.2) THEN
APPENDIX D. (Cont'd.)

WRITE(6,*) ERR_1_2
GO TO 502
ENDIF

IF(REPLY.EQ.1) THEN
    COUNT2 = 0 ! initialize counter for total number of stands
    OPEN(10,FILE=PFILE,STATUS='NEW', ERR=820)
    PRINT *, 'How many compartments?'
    READ(kbd,*) INDEX_NUM
    PREV_COUNT = 0 ! initialize variable to keep track of the
                   ! number of stands in the previously
                   ! entered compartment.

C Retrieve info from the CISCnnn file for every compartment
C to be included in this area

DO 500 I=1, INDEX_NUM
    ID = I
    CALL CISC_ENTER(ID, PREV_COUNT, COUNT2) ! Read from CISC
    CONTINUE

CLOSE(10)
NSTNDS = COUNT2
WRITE(6,801) PFILE, COUNT2
FORMAT('1', '80a',//,
     *                       ***************\)/
     *  ' DATA FILE "", A24, '" CREATED'\)/
     *  ' This area contains ',I4, ' stands'\)/
     *                       ***************\)/

Call Pause
ENDIF
IF(REPLY.EQ.2) THEN
    PRINT *, 'Enter the number of stands in this area - '
    READ *, NSTNDS
ENDIF

*****************************************************************************
*                           Stand Description Input Section               *
*                           Keyboard Input                                *
*****************************************************************************

ELSE ! Stand is NOT in Data File.
C This option reads data from the keyboard rather than
C from a data file, and creates a data file using the
C area name as the file name.
C
    FLAG = 0
    PRINT *, 'Enter the number of stands in this area - '
    READ *, NSTNDS

OPEN (UNIT=10, FILE=PFILE, STATUS='NEW', ERR=820)
GO TO 8
ENDIF
APPENDIX D. (Cont’d.)

C For the existing data files, read data and perform calculations
C Open the existing or newly created data file.
504 OPEN (UNIT=10, FILE=PFILE, STATUS='OLD')
80 READ (10,800) IST,FT(IST),AC(IST),ACOP(IST),BD(IST),
     *       MT(IST),REGYR(IST),BRNYR(IST),THNYR(IST)
GO TO 12

! To create the data file, have user enter information.
8 PRINT 111, IST
111 FORMAT (' Enter for stand ',I3,' the Forest type, Acres,'
     *     Management Type, and FY Regen ','/
     *     ( ENTER 0 if N/A )<NL>')
PRINT *, ' Enter the forest type (xxx) - '
READ *, FT(IST)
PRINT *, ' Enter the total acres (xxxx) - '
READ *, AC(IST)
PRINT *, ' Enter the acres to be kept in permanent wildlife ',
     *   'openings - '
READ *, ACOP(IST)
PRINT *, ' Enter the birthdate (xxx) - '
READ *, BD(IST)
PRINT *, ' Enter the management type (xxx) - '
READ *, MT(IST)
PRINT *, ' Enter the regen year (xxxx) - '
READ *, REGYR(IST)
PRINT *, ' Enter the year it will be burned (xxxx) - '
READ *, BRNYR(IST)
PRINT *, ' Enter the year it will be thinned (xxxx) - '
READ *, THNYR(IST)

C Decode the forest type code and management type code.
12     IF ( FT(IST) .GE. 100) FT(IST) = MOD( FT(IST),100)
220     IF ( MT(IST) .GE. 100) MT(IST) = MOD( MT(IST),100)

C This is old code.
C225    IF (REGYR(IST) .GT. 0 ) THEN
C     'ACCOM' is the accomplishment part of the FY regen code
C     ACCOM = MOD( REGYR(IST),10 )
C ELSE
C     ACCOM = 0
C     ENDIF

C Determine if the stand has been cut and assign an age.