

Mac Classic OS Directions

Prior to running DT_ModSel, you ll have to do the following:

- 1) Install MacPerl:
It is available (free) at the following web site:
<http://www.macperl.com>
- 2) Download the following three files: You can cut and paste them into a word processor or BBEdit. Make sure you save them as flat text files.
 - a. Model_Commands
 - b. DT_MacModSel
 - c. ParmFile.txt

It may be helpful to create a folder called DTModSel to contain the files you need.

- 3) Obviously, you ll need PAUP to be installed.

To run the algorithm, do the following:

- 1) Append the contents of Model_Commands to the end of the Nexus file that contains the data to analyze.
- 2) Run PAUP using the new Nexus file to generate two new files:
 - a. score_file
 - b. tree_file.tre

It s often convenient to rename these to coincide with the name of the data file. For example if the sequences are in the file Plethodon.nex, score_file & tree_file.tre could be renamed Plethodon.score & Plethodon.tre, respectively.

- 3) Make sure to transfer the score and tree files to the folder where DT_ModSel resides.
- 4) The file ParmFile.txt contains three lines that must be modified as follows.

```
Score_File name: Plethodon.score  
Tree_File name: Plethodon.tre  
Sample_Size: 711
```

Important note: the sample size is the number of nucleotides in the sequence and **NOT** the number of individuals.

- 5) Open MacPerl by double clicking on the icon.

- 6) Go to the Script option on the menu bar at the top of the screen and pull down to Run, or simply type command-R. Navigate to DT_MacModSel and hit return
- 7) The output of the program is the model selected following Minin et al (2003).