Age Comparisons Assignment

Herbst and Marsden (2012) (reprint is here) compared the precision, bias, and reader uncertainty of scales, dorsal fin rays, and otolith age estimates from 151 lake whitefish (*Coregonus clupeaformis*) from Lake Champlain in 2009. The data for their comparisons were recorded in `WhitefishLC.csv`. This file contains inital age assessments for two readers on three structures (variable names are the structure name with a "1" or "2" appended to denote the reader). In addition, the two readers developed a consensus age (variable name is the structure name with a "C" appended).

1. Use a variety of methods (tabular, graphical, and statistical) to describe any apparent bias in *consensus* ages between scales and otoliths.

2. Describe any apparent bias in age assessment for otoliths between the two readers.

3. Describe precision of age assessment between the two readers for otoliths.

4. (*Time Permitting*) Describe any apparent bias in age assessment for scales between the two readers.

5. (*Time Permitting*) Describe precision of age assessment between the two readers for scales.

6. (*Time Permitting*) Use a variety of methods (tabular, graphical, and statistical) to describe any apparent bias in *consensus* ages between fin rays and otoliths.

7. (*Time Permitting*) Describe any apparent bias in age assessment for fin rays between the two readers.

8. (*Time Permitting*) Describe precision of age assessment between the two readers for fin rays.