**Appendix 4 - ImageJ**

**ImageJ** is a free, user-friendly application for analyzing color, size, and other attributes within image files. The application can be downloaded at <http://rsbweb.nih.gov/ij/index.html>.

To quantify the land cover indicated in a landscape shown within the **MRLC Consortium Viewer**, make a screen grab of the landscape visualization (using Windows **Snipping Tool,** or the Mac OS see <http://www.wikihow.com/Take-a-Screenshot-in-Mac-OS-X> ) to copy the section of the land use image you intend to analyze. In **ImageJ**, select the scroll-down menu **File** > **New** > **Image**. **Name** the file if you intend to save it, modify the **Type** if you wish,then paste the screen grab into the panel.

Click the **Square Icon** to select area to analyze. After selecting the area of the image that indicates land use, select the scroll-down menu **Analyze** > **Histogram**. This will provide a figure showing a pixel count of each color class. In the **Histogram** panel, click **List**. This will provide a text list of each color class, and the count of pixels at that pixel class. Select the scroll-down menu **File** > **Save as..** Save this file, which can be opened in **Excel** (or other spreadsheet program) to calculate the proportional coverage of each land use class (see Appendix 5).

**List of histogram data**

**To list histogram data**

**Analysis scroll-down, contains option histogram**

**Image**

**view**

**Button to select image section for analysis**

**Color**

**histogram**