

## **Continuous Monitoring: Stream Temperatures and Northern Spotted Owl data sets at Jackson Demonstration State Forest**

Brian Bishop, Jackson Demonstration State Forest, California Department of Forestry and Fire Protection, 802 North Main Street, Fort Bragg, CA 95437; (707)964-5674 ex 117;  
[brian.bishop@fire.ca.gov](mailto:brian.bishop@fire.ca.gov)

This poster shall display how Jackson Demonstration State Forest (JDSF) is currently gathering and using stream temperature data and Northern Spotted Owl (NSO), *Strix occidentalis caurina*, survey data over its 48,652 acre ownership. JDSF Foresters use these data as important indicators of stream and wildlife habitat conditions in the course of preparing Timber Harvest Plans (THP). This rich data is used for specific project goals, but because it is gathered over a large land base, is of additional value to help answer landscape level questions. Specific opportunities associated with this data use may include: validation of either experimental or operational expectations, testing of models or regulations, suggesting complex interactions that may need additional study. This poster highlights the types of data available at JDSF for future project inquiries.

Stream temperature plays an important role in stream biology. It is important that land use managers in the redwood region utilize this type of data for decision making. Stream temperature data have been continuously collected since 1996 on JDSF. Comprised of 33 temperature monitoring stations, data has been collected 24 hours per day annually June through October. It is currently available in an Excel spreadsheet. Examples of data use will be displayed in the poster.

NSO surveys are conducted utilizing a U. S. Fish and Wildlife Service survey protocol across the Forest. The NSO is a federally threatened and California candidate species (threatened). Data from these surveys aids land use managers in protecting the NSO during THP operations and locating areas of habitat use. NSO data associated with 8 to 16 separate territories within JDSF has been recorded for the last decade. Survey efforts shift annually, so not all territories are surveyed each year. Typically, stations across the Forest are surveyed from March 1<sup>st</sup> through August 31<sup>st</sup> of each year. Hard copies of detailed field work with maps and UTM locations are available.

This data is available to researchers and interested parties to aid their understanding of stream temperature characteristics and NSO dynamics. It can be combined with other data sets such as with California Department of Fish and Wildlife and the joint U.S.D.A. Forest Service – Pacific Southwest Experimental Station, Caspar Watershed datasets.