

Abstract for 4th Annual Forest and Inventory and Analysis Symposium:

**Multiple-species Monitoring in Association
with FIA Points in the Sierra Nevada
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Environmental concerns for the fate of the Sierra Nevada prompted the revision of management direction for a variety of ecosystems on National Forest System lands in the Sierra Nevada. The revision included an Adaptive Management Strategy outlining a comprehensive environmental monitoring program. The monitoring program adopted the FIA grid system as the primary sample design wherever possible, including the development of multiple species monitoring approach. A large-scale multiple species monitoring approach was needed because almost 50% of the vertebrates and 25% of the vascular plants in the Sierra Nevada were identified as being of concern. The monitoring plan for species and their habitats was intended to generate data on the status and change of species and habitat distribution and abundance. Ancillary benefits include developing multi-scale habitat models as a basis of assessing the status and change of habitat conditions and evaluating current and candidate 'focal species' that have indicator or umbrella function. In 2001 and 2002 pilot tests were conducted where 10 detection methods for vertebrates and vascular plants were employed at a total of 48 points. Results provided valuable information on design efficiencies, detection probabilities, and logistical considerations for collocation of data collection at FIA points.