

Tools for Bird Conservation in Conifer Forests

A California and Oregon-Washington Partners in Flight Workshop

EXECUTIVE SUMMARY

The Oregon/Washington and California Partners In Flight chapters held a joint workshop in April 2005 to establish a strategy for implementing regional conservation plans within current land management policies. Forest and district administrators, biologists, managers, and researchers participated in this workshop that focused on the integration of Partners In Flight (PIF) products (e.g. broad-based conservation plans, issue-specific decision support tools, and monitoring and research techniques) with agency policies and land management plans. The workshop consisted of a series of presentations and discussions regarding:

- Application of monitoring and research to forest bird conservation;
- Federal management regulations and policies;
- Use of national and regional PIF bird conservation plans at the project level;
- Integration of focal species bird monitoring within the adaptive management framework;
- Quantitative habitat and population objectives; and
- Useful products for forest bird conservation.

The workshop resulted in a conservation planning strategy that includes three goals to advance the integration of bird conservation objectives and land management planning. Outcomes from the meeting will include:

- 1) Products that present the link between specific management issues, science-based results, and bird conservation objectives. These products will provide decision support tools and best management practices to help land managers make informed decisions regarding land management planning and bird conservation objectives.
- 2) A white paper including examples of ‘success stories’ outlining how science-based PIF products (e.g. results from bird monitoring) were used to assist and evaluate land management decisions.
- 3) Opportunities for linking PIF objectives with priority land management issues and projects within revisions of Bureau of Land Management and Forest Service management plans and integration of PIF monitoring techniques within agency effectiveness monitoring programs.

As a result of the workshop, the NGOs present agreed to develop a west-wide coordinated monitoring and evaluation strategy to assist state and federal agencies in developing conservation and management plans using current biological information on focal bird species. The western states are in a unique position to build decision support tools that will apply to common management issues across state borders thanks to the numerous NGOs with local expertise and strong partnerships with neighboring agencies, and the plethora of bird data already in existence.

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Workshop Summary

Introduction

The joint Oregon/Washington and California Partners In Flight workshop was held in April 2005. The objective of the workshop was to establish a strategy for implementing regional conservation plans within current land management policies. Administrators from the Forest Service and Bureau of Land Management, biologists, managers, and researchers participated in this workshop. Workshop sessions focused on the integration of Partners In Flight (PIF) products (e.g. broad-based conservation plans, issue-specific decision support tools, and monitoring and research techniques) with agency policies and land management plans. This report summarizes the workshop sessions and is a synthesis of the information presented and group discussions that followed.

Application of Monitoring and Research to Forest Bird Conservation

Moderator: Aaron Holmes (PRBO Conservation Science and Oregon State University)

Eight presentations related to recent research into the conservation and management of conifer habitats and associated bird species were made by government, non-profit, and university researchers. Topics included considerations for study design and interpretation of results when studying wildland fire, snag ecology, potential effects of salvage logging, and the importance of approaching management actions for wildlife at multiple spatial scales. The importance of managing landscapes for birds on their wintering grounds was emphasized with strong evidence that over-winter and annual survival are driving population declines in a number of species. A consistent theme that emerged throughout the session was the importance of understory vegetation – especially deciduous and hardwood shrubs to many species of conifer associated bird species. These understory plants provide important nest sites and are also play an important role in fostering arthropod rich environments. Presentations on the list below that have an * were summarized recently in the Flight Log, available on the web:

http://www.prbo.org/calpif/pdfs/Flight_Log_15.pdf

- Using bird monitoring data to guide forest management on the Lassen National Forest. Ryan Burnett and Chrissy Howell
- *Foraging ecology of birds associated with understory vegetation in western Oregon forests. Joan Hagar
- Monitoring, modeling, and management of birds of conservation concern in national forests of the Pacific Northwest : a landscape analysis of 10 years of MAPS data. Phil Nott
- Linking MAPS, MoSI and BBS data to disentangle the proximate demographic causes of population declines in Nearctic-Neotropical migratory birds: evidence appears to point to wintering-ground processes. David DeSante, Danielle Kaschube, and James Saracco.
- *Bird responses to thinning and prescribed fire in ponderosa pine. Steve Zack, Kerry Farris, and T. Luke George.
- *Trial by Fire: Research design, wildfire, and bird conservation. Nat Seavy
- Response of bird communities to multiple fires and post-fire logging in mixed conifer forests of southwestern Oregon. Joe Fontaine
- Prescribed fire effects on birds in the Sierra Nevada. Karen Bagne

Federal Management Regulations and Policies

Moderator: Barb Bresson (US Forest Service and Bureau of Land Management)

The session on policy and regulation focused on four major laws/regulations currently guiding the PIF landbird conservation initiative within the federal agencies. The first law discussed was the Migratory Bird Treaty Act (MBTA) with special emphasis on the issue surrounding “take” of migratory birds. We reiterated that the issue of incidental take had not been worked out between the Fish and Wildlife Service (FWS) and governmental agencies to date, but did provide a list of activities that were permitted by the FWS. The good news regarding the MBTA was the passing of the Migratory Bird Treaty Reform Act (MBTRA) 2004 which specifically excludes non-native birds from being covered by the MBTA. A list of the excluded species is currently published on the FWS web site at <http://migratorybirds.fws.gov/> and includes species such as the European starling, house sparrow and mute swan.

The 2001 Executive Order (EO) 13186 signed by President Clinton was also discussed. The order directs federal agencies to take certain actions to further implement the MBTA. Some of the highlights included suggestions that agencies minimize their impacts on migratory birds, include avifauna in agency planning and National Environmental Policy Act (NEPA) processes, strive to restore or enhance habitats, and most importantly to develop Memorandum of Understandings (MOU's) with the FWS within two years of the EO. The MOU's are to be developed by those federal agencies whose actions have or are likely to have a measurable negative affect on migratory bird populations. Guiding principals for developing the MOU's include building upon existing bird conservation coalitions, avoid burdensome regulatory oversight processes, favor programmatic, integrated, collaborative approaches and align with “multiple use” missions. The MOUs need to be flexible enough to allow local biologist and mangers to have input and guidance . The MOU's purpose is to promote the conservation of migratory birds, minimize the potential for adverse effects and to compliment existing partnerships in bird conservation. All of the MOU's are currently in draft forms. A recent meeting between the Council on Environmental Quality, the Director of the FWS, the Department of the Interior's Assistant Director of Fish Wildlife and Parks, the Office of Management and Budget, and the FWS's Division of Migratory Birds discussed the content of the existing draft MOUs and whether or not they meet the intent of the EO. While revisions are necessary on all drafts, all parties indicated their desire to have these MOUs finalized and for all agencies to meet the commitments of the Executive Order. This direction has reinvigorated efforts to finalize a handful of MOUs that are closest to being complete.

There were two presentations from the Bureau of Land Management (BLM), Forest Service (FS) and FWS on those agency perspectives with regards to implementing the various authorities. The BLM and FS currently encourage specialists to incorporate the various Bird Conservation Plans into their agency planning processes and where possible to integrate aspects of the interim EO as well. Recommendations were made to work collaboratively with partners and maintain consistency, where possible, with the various elements highlighted in the interim EO. Other recommendations include, incorporating the conservation measures contained in the EO into planning, include PIF priority species in analysis, disclose the potential for unintentional take, identify criteria to evaluate effects to species and look at the long and short term effects on the species.

The FWS perspective regarding the MBTA dealt with their enforcement of the law with regards to incidental and intentional take. Intentional or direct take has always been prohibited unless authorized by permit from the FWS. Permitted activities include uses for falconry, Indian religious purposes, scientific

collecting, rehabilitation, education, and taxidermy, and other permissible activities. Sources of incidental take include collisions with high tension lines, buildings, vehicles, windows, communication towers, wind turbines, and encounters with pesticides and cats. The FWS works with corporations and other individuals in developing plans and guidelines to reduce these mortality factors when possible. They also can and have litigated against those that do not take reasonable corrective actions to minimize take. Recent litigation has also found that Federal agencies, in addition to members of the public, are liable for the provisions of the MBTA. Only the Department of Defense is authorized to incidentally take migratory birds as a result of military readiness activities. However, the recent EO was developed to assist federal agencies in knowing their responsibilities within the MBTA and limiting their negative effects on populations.

The last portion of the session dealt with the BLM and FS agency planning processes that are ongoing. The FS presentation focused on the new planning rule and its emphasis on ecological sustainability, and commitment to species conservation. The new process provides better opportunities for the public to be involved and greater encouragement to Tribes, other agencies and local governments to participate in the processes. The difference with the new plans is that they will be more strategic, will not require Environmental Impact Statements (EIS) as there is a new Categorical Exclusion (CE) category to cover Forest Plans and further NEPA analysis will be completed at the project level. More information regarding the planning rule can be found at the FS national web site.

The BLM is currently updating their westside Oregon Resource Management Plans (RMPs). This is a multi-year process (2005 to 2008) and the BLM is encouraging the public to participate and stay engaged throughout the process. Opportunities for public involvement include scoping, presently scheduled for fall of 2005, public review of the Draft RMP/EIS, and review of the Proposed RMP/Final EIS. Public meetings will be scattered throughout western Oregon. The project area includes all BLM-administered lands in western Oregon plus the Klamath Resource Area. For additional information please view the internet site at www.or.blm.gov and look under land use planning.

Using Partners In Flight Conservation Plans

Moderator: Jaime Stephens (Klamath Bird Observatory and Oregon-Washington Partners In Flight Co-chair)

This session included presentations on the PIF conservation plans and examples of how to integrate these plans with land management practices. Terry Rich, the National PIF Chair, reviewed the *PIF North American Landbird Conservation Plan*, which provides a continental perspective of landbird conservation priorities. The continental plan incorporates population estimates and sets population objectives, identifying species of the highest conservation priority. Kim Krietinger, California Partners In Flight coordinator discussed the processes involved in writing the seven habitat conservation plans. The plans identify habitats and habitat attributes important to focal species, incorporating the most current scientific information, and providing science-based recommendations that directly benefit birds, their habitat, and other wildlife. Focal species represent habitat attributes, allowing an ecosystem approach to conservation. John Robinson, US Forest Service Pacific Southwest Regional Partners PIF Coordinator, discussed the details of the *California Conifer Forest Plan* and Bob Altman, North American Bird Conservation Initiative Pacific Regional Coordinator, discussed the specifics of the Oregon/Washington Conifer Forest Plans. These plans can be used in the design and revision of planning documents, and incorporated into

land management and restoration. Partners In Flight monitoring techniques measure management's effectiveness at reaching desired conditions by tracking bird population responses to management and restoration. Mike Green, US Fish and Wildlife Service Pacific Region Landbird Biologist provided examples of integration of the PIF conservation plans into management at both the Klamath Marsh and Little Pend Oreille National Wildlife Refuges. Dawn Lipton, the Wildlife, Fish and Botany Program Leader on the Eldorado National Forest and provided an additional example involving integration of the conservation plans and PIF focal species into the selection of management indicator species on the Sierra Nevada National Forests.

The presentations were followed by a panel discussion and questions. Discussion topics included the need for updating the coniferous forest plans and the need to secure funding for that purpose. It was suggested that the plans be updated every three to five years. Additional discussion addressed extending the coniferous forest plans to include resident birds outside of the breeding season. Several post PIF bird conservation plans included many examples of integrating conservation objectives within management programs in riparian, chaparral/oak and sagebrush ecosystems. The integration of the plans into management was an important topic that generated discussion. A consensus was reached that we need to bring the PIF conservation plans to the forefront regionally, and more importantly provide support locally by working with management decision makers on local forests, FS ranger districts, BLM districts and BLM resource areas.

Integration Of Bird Monitoring Within The Adaptive Management Framework

Moderators: John Alexander (Klamath bird Observatory and California Partners In Flight Executive Steering Committee) and Geoff Geupel (PRBO Conservation Science and California Partners In Flight Co-chair)

This session started with presentations about using PIF products to integrate bird conservation and land management plans and the application of monitoring results within changing forest management policies. Presentations were followed by a group discussion about strategies to integrate monitoring within management policy. When considering proposed management actions PIF conservation plans can be used to identify related habitat characteristics and associated focal species. Based on management treatment prescriptions predictions can then be made regarding changes in the related habitat characteristics and resulting changes in focal species abundance. Comparisons of bird abundance in treated and untreated areas, or in areas before and after treatments occur, can then be used to test the predictions. The results can then be used to evaluate the degree to which a management action is consistent with bird conservation objectives and recommendations can be made to better align management and conservation objectives.

Within this adaptive management framework standard bird monitoring techniques can be used to integrate bird conservation and management objectives. As a tool for measuring ecological changes PIF monitoring methods can be used to evaluate the ability of management to reach desired conditions and fulfill, in a cost-effective manor, monitoring requirements and mandates.

During discussions recommendations regarding implementation of the Migratory Bird Treaty Act Executive Order should include integrating PIF focal species conservation with management objectives and evaluating the effects of management on focal species. It was identified that this process must begin during project scoping. To be effective PIF conservation planners must work with management

leadership teams on a continual basis to assure that programmatically the integration of PIF conservation and monitoring objectives are considered during project scoping and that project level follow up is completed. Such programmatic integration must be included in Forest and Resource Management Plans.

Consensus on the following ‘talking points’ was reached by a majority of the participants:

- 1) Birds are excellent and effective as indicators of forest/habitat condition (not just for ‘bean counting’ or increasing populations of birds)
- 2) Importance of site specific information can not be underestimated. Variation by species, guild and site is well documented. Ideally all projects should incorporate a bird monitoring component. By having a hierarchy of standardized methods (allowing comparison to long-term reference sites) and working with local NGOs monitoring and evaluation may be implemented at a reasonable cost (e.g. as little as 2 visits per year depending on objectives).
- 3) Importance of ongoing and long-term data collection (>10 years) at key sites is critical to adaptive management.
- 4) Results from monitoring and evaluations projects need to be available in a timely manner in timely manner:
 - Funding for data management and analysis (30% of funding should be dedicated to this).
 - Need more web-based decision support tools (examples include the CalPIF breeding database (www.prbo.org/calpif) and the Avian Knowledge Network (in development)).
 - Habitat conversion models using current bird data will allow us to ‘forecast’ amount of habitat needed to effectively manage bird populations
 - Need for accessible geo-referenced data. Provide easy queryable data sets to agency managers and biologist (eg. CDs).
- 5) Need to put results on the ground:
 - Management Guidelines at the local and regional scale.
 - Update and distribute BCPs to a broader audience including integration with new ‘State Wildlife Grant’ funds.
 - Put more and better habitat on the ground. We need to work more closely with Joint Ventures, RCDs, County agencies, watershed groups and Land trusts.
 - Need accountability.
- 6) Policy should be based on a ‘carrot’ rather than ‘stick’. Over the long-run voluntary compliance will succeed in reaching habitat goals.

Quantitative Habitat and Population Objectives

Moderator: Kim Kreitinger (PRBO Conservation Science and California Partners In Flight Coordinator)

Biological objectives represent what is required to sustain healthy, intact ecosystems and biotic integrity. Unfortunately, simply defining the amount of acreage to be conserved or enhanced is no longer adequate as federal bean counters want more accountability. With birds as form of conservation currency, researchers and project managers are beginning to use bird population metrics as the foundation for science-based biological objectives. Biological objectives are intended to guide avian and habitat conservation efforts and provide them with a gauge of success in a cost-efficient manner. Fulfilling these goals will require a partnership driven, coordinated, on-the-ground activities and monitoring programs conservation action. This session provided examples of multiple partners implementing

objectives for project prioritization and assessment and described the process of setting biological objectives at different scales.

The international PIF approach to biological objectives utilizes PIF watch list and stewardship species categories. The watch list species goal is to maintain current populations, or to return declining populations to their numbers in the late 1960s. Targets for additional stewardship species are based on maintaining populations at levels of the 1990s. This is presented as a reasonable baseline for species that are not as vulnerable as Watch List species but still need a clear, measurable objective.

Presenting numerical population targets for smaller planning units is equally important. Smaller jurisdictions allow for a refined process with prescriptive objectives. Additionally, smaller planning units, such as the watershed or project level, will facilitate hypothesis testing and progress tracking through monitoring. One example from a project conducted in riparian habitat in California illustrates how population targets are important at the bioregional level. In this example, point count and spot mapping data were used to estimate current population sizes for select riparian focal species. These estimates were then extrapolated to GIS layers that assessed the amount of current and potential riparian habitat enabling biologists to develop population targets. Knowing the amount of potential restorable habitat within a bioregion is essential for maximizing funding and resources.

To demonstrate a process for establishing regional population objectives that support continental objectives and analysis of Pacific-slope Flycatcher populations in the Pacific Northwest was presented. GIS analysis conducted by watershed examined flycatcher densities in different age classes by coniferous forest type. Using Breeding Bird Survey (BBS) trend data in conjunction with the GIS data, biological objectives were developed to double, increase by 50%, or maintain Pacific-slope Flycatcher populations at a regional level. The next step was then to translate those population objectives into habitat conserved or restored.

The last presentation of this session highlighted the need to scientifically test these biological objectives, thereby incorporating the adaptive management philosophy. This study used PIF conservation plans to identify focal species and habitat characteristics; predict potential changes in bird abundance at treated and untreated sites; compare bird abundance at treated and untreated sites; and evaluate the degree to which management is consistent with bird conservation objectives.

Useful Products for Forest Bird Conservation

Moderators: Melissa Pitkin (Klamath Bird Observatory) and Sue Abbott (PRBO Conservation Science)

Using examples of outreach products relating to best management practices and decision support tools, the goal of the session was to understand specifically: 1) how agencies and other groups use or could use these types of resources, and 2) how such resources can be designed to make them most useful to the target audiences.

During this session an open discussion of target audiences, scale, content, format, and funding was facilitated. This interactive discussion engaged audience members from all affiliations. The discussion of audiences produced an extensive list including agencies, environmental organizations, private

landowners, corporations, and policy makers. The need to reach and integrate to state wildlife and forestry agencies was noted. The broad list indicates the need to conduct outreach to diverse partners. When discussing the appropriate scale for these materials it was agreed that it would vary by audience. As we discussed the appropriate scale for these materials for management agencies responses varied from wanting broad generalities by habitat type to specific recommendations that address watershed-scale management issues. Important components of content included citations, websites, and laws in addition to desired ecological conditions, recommendations, and step-by-step actions. Issues of format included a need for colorful and attractive products presented through printed publications, public broadcasting, list-serves, and meetings. By the end of the session the audience generated an extensive set of comments for each topic area that will be summarized and included along with meeting white papers.

Workshop Conclusion

The workshop resulted in a conservation planning strategy that includes three goals to advance the integration of bird conservation objectives and land management planning. Outcomes from the meeting will include:

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As a result of the workshop, the NGOs present agreed to develop a west-wide coordinated monitoring and evaluation strategy to assist state and federal agencies in developing conservation and management plans using current biological information on focal bird species. The western states are in a unique position to build decision support tools that will apply to common management issues across state borders thanks to the numerous NGOs with local expertise and strong partnerships with neighboring agencies, and the plethora of bird data already in existence.

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