

**Integrated Conservation Framework for
Western Temperate, Mexican Pine-oak, and Tropical Cloud Forest Birds:
North America to Central America Version 1.1**



This integrated conservation framework represents the collaboration and unified vision of an international group of agencies, organizations, and individuals. These partners contributed to this plan during two meetings: 1) 5th International Partners in Flight Conference and Conservation Workshop held in Snowbird Utah, United States in August 2013; 2) Partners in Flight Conservation Business Plan Workshop held in Guadalajara, Mexico in April 2016. See APPENDIX C for a list of participants. This conservation investment framework was subsequently compiled by John Alexander, Claudia Macias Caballero, Sarahy Contreras-Martínez, David Younkman, Tanya Luszcs, Rosa Maria Vidal, Brian Smith, Dan Casey and Becky Stewart.

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INTRODUCTION

Migratory landbird species that breed in the temperate forests of western North America predominantly winter in the montane forests of western Mexico and northern Central America (Figure 1; Berlanga et al. 2010). Many of these migratory species are of moderate to high conservation concern based on Partners in Flight's vulnerability assessments (Table 1; APPENDIX A; NABCI 2016, Rosenberg et al. 2016, Panjabi et al. 2021). Amazingly, through their migration these birds connect the diversity of temperate forest habitats where they breed in Canada and the United States with the imperiled pine-oak and tropical cloud forests of western Mexico and northern Central America, where they overwinter. They share their 'wintering' habitats with the many highly threatened resident birds that depend on these pine-oak and tropical cloud forests year-round (Table 1; APPENDIX A; Berlanga et al. 2010).

The population declines that these migratory and resident birds are suffering are a signal that the natural systems that these birds depend on throughout their lifecycle are being severely impacted by human activity (Berlanga et al. 2010, Rosenberg et al. 2019). Threats associated with unsustainable timber harvest, fire management, water management, agriculture, and other anthropogenic factors are impacting their western temperate, pine-oak, and tropical cloud forest habitats. To address these threats an international group of agencies and organizations collaborated to create this conservation framework (Santana et al. 2018). The framework:

- Includes a comprehensive list of target bird species that are of conservation concern (Table 1, APPENDIX A) and a list of indicator bird species that are representative of healthy conditions in western temperate, pine-oak, and tropical cloud forests (APPENDIX B),
- Presents a ranking of the threats (Table 2), along with contributing factors, that most impact these three target habitats,
- Outlines a set of integrated strategies (Table 4) that can be used to address these threats and reverse the population declines of the target species, and
- Illustrates relationships among strategies, threats, and target habitats and species using a basic conceptual theory of change model.

We designed this framework to help focus, align, coordinate, and measure the effectiveness of our conservation efforts of these target habitats and birds. As a result, this framework can serve as a tool for cross-project learning and for stepping-down and rolling-up information across conservation efforts in a meaningful way (Conservation Measures Partnership 2020).

The geographic scope of this framework is defined by the full lifecycle distributions of migratory birds that breed in North America's temperate western forests and winter in the pine-oak and tropical cloud forests of western Mexico and northern Central America (Figure 1).

TARGET AND INDICATOR BIRD SPECIES

One-hundred sixteen of the migratory and resident birds that depend on the western temperate, pine-oak, and tropical forests throughout their lifecycles are the targets of this conservation framework because they are recognized as species of conservation concern (APPENDIX A; Rosenberg et al. 2016). Sixteen are listed as "at greatest risk of extinction" (Table 1), with the vast majority of these most at-risk species being residents that spend their entire lifecycle in the Mexican and Central American pine-oak and cloud forests (Berlanga et al. 2010). Three of these at-risk species breed in temperate forests; 13 additional target birds that inhabit western forests are recognized as watch list species (Table 1; NABCI 2016).

This framework recognizes 148 focal/indicator species that are representative of target habitat conditions during breeding and/or non-breeding seasons (APPENDIX B). These focal birds include suites of species associated with key habitat components that represent functioning ecosystem and thus, represent important elements of ecological integrity and biodiversity within the three target habitats (Chase and Geupel 2005, Stephens et al. 2019). The focal species in this framework were selected from various conservation plans and other sources (Altman 2000a, 2000b, 2000c; Altman and Alexander 2012; Altman and Stephens 2012; CalPIF 2002a, 2002b; Contreras-Martínez et al. 2015; Macías Caballero et al. 2015; RHJV 2004; and SEMARNAT 2016). These focal species can be used to set measurable habitat objectives that inform broad-scale strategic habitat conservation designs as well as project prescriptions (Alexander 2011). Focal species monitoring can then be used to measure the site-level and cumulative effectiveness of our conservation actions, allowing for an adaptive strategic conservation approach.

THREATS

We completed a threats assessment to focus conservation strategies on the human-induced actions that most impact our target bird species by directly degrading one of more of our target habitats. First, we identified direct threats and contributing factors (Tables 2 and 3) and evaluated their relationships to our target habitats and birds (Figure 2). Direct threats are limiting factors that directly degrade our target and contributing factors are human-induced actions or events that underlie or lead to the direct threats. We used a standard lexicon to classify our direct threats (Conservation Measures Partnership 2020). After identifying the direct threats, we rated each threat by assessing the magnitude of its impact on our target habitats and birds (Table 5).

There are six high rated threats (Table 2). Three of these are associated with the modification of natural systems and include the disruption of natural fire regimes, water management and altered hydrology, and inadequate forest restoration. Two additional highly rated threats are associated with unsustainable and expanding agricultural practices and include both livestock grazing and farming. Unsustainable logging and wood harvesting is also a high rated threat.

Eight additional threats are rated as moderate (Table 2). They include three climate change related threats – habitat shifting and alteration, drought, and temperature extremes. The overharvesting and collecting of birds and plants are two moderate threats that relate to biological resource use. The additional moderate threats are invasion of land and urbanization associated with residential development, mining and forest diseases and insect outbreaks.

We identified ten contributing factors relating to economic, cultural, societal, political, or institutional factors that allow or encourage direct threats to occur. These represent factors that limit our ability to reduce the direct threats that impact our targets. Three are economic in nature and include a lack of funding, market demands and globalization, and poverty. The seven additional contributing factors relate a lack of public and political will to develop adequate conservation laws and policies, resource conflict and the marginalization of communities that depend on sustainable resource use, a lack of knowledge relating to the societal benefits of conservation and information gaps that limit our ability to restore our target habitats and birds, and a lack of institutional capacity for coordinating integrated conservation planning and action.

This threats rating serves as a foundation for developing focused conservation strategies to reduce the human-induced actions that most impact our target habitats and protect and restore these targets. By considering these threats, we can identify where opportunities for intervention will most likely result in the stabilization and improvement of target conditions.

STRATEGIES AND OUTCOMES

We identified a set of conservation strategies (Table 4) that are focused on specific direct threats and contributing factors within both biological and socioeconomic contexts (Figure 2). We considered factors that drive each threat to highlight points of intervention, identified a broad array of opportunities, and then developed strategies that can achieve intermediate outputs and longer-term conservation outcomes relating to threat reduction and result in improved target conditions. We used a standard lexicon to classify our conservation strategies (Conservation Measures Partnership 2020). We developed 18 conservation strategies (Table 4) and illustrated their relationships with other strategies, direct threats, contributing factors, and target habitats and birds (Figure 2). These include a set of enabling strategies and a set of conservation action strategies.

Twelve enabling strategies relate to education, conservation policies, economics, and capacity building (Figure 2). Six education and conservation policy related strategies are designed to fill information gaps and provide education, outreach, and professional training programs to reduce social, cultural, and political limiting factors and economic barriers. By addressing these contributing factors, the strategies will enable four economic and funding strategies that will in turn enable two capacity building strategies.

With an increased capacity for conservation planning, coordination, implementation, and evaluation we will have an improved ability to implement six conservation action strategies designed to reduce the direct threats that impact our target habitats and birds to stabilize and improve target conditions. These conservation action strategies include using mechanisms to protect targets against development, agricultural, and resource extraction threats. They also include a suite of conservation management strategies designed to increase the sustainability of resource extraction activities, restore the ecological conditions and processes within our target habitats, and mitigate climate impacts. Together, these integrated full lifecycle strategies are designed to stabilize and reverse the population declines that our target birds are suffering.

NEXT STEPS AND CONCLUSION

By taking an integrated and adaptive approach to implementing the enabling and conservation action strategies outlined in this framework our conservation investments will more likely result in measurable outputs and outcomes. These short-term outputs relate to implementing specific protection and restoration actions that will reduce specific direct threats and contributing factors. By monitoring our ability to achieve such outputs we will ultimately be able to achieve meaningful conservation outcomes that can be evaluated by measures of improved target habitat conditions and stabilized bird population trends.

This integrated conservation framework is designed to help coordinate and focus international efforts to address the human activities that are impacting the natural systems that our declining migratory and resident bird depend on. Our list of target forest bird species is drawn from Partners in Flight's robust species assessments that identifies the species that are of the highest conservation concern (Panjabi et al. 2019). The threats ranking presented in this framework represents consensus among a broad group of international partners about the most significant factors that impact these birds of conservation concern and the western temperate, Mexican pine-oak, and tropical cloud forests that they depend on throughout their life cycle. Our strategies are connected

to each threat as an integrated framework designed to help focus, align, coordinate, and measure the effectiveness of our investments in the conservation of these target habitats and birds.

Our next steps will involve using this framework as a tool for the voluntary integration of conservation efforts throughout the breeding and overwinter distribution ranges of migratory birds that breed in North America's temperate western forests and winter in the pine-oak and tropical cloud forests of western Mexico and northern Central America. This will involve creating more specific and scaled output and outcome indicator measurements that will help step-down this strategy to on-the-ground conservation efforts and roll-up information across such conservation efforts to ensure cross-project learning and adaptive progress on meeting our goal of stopping and reversing the declines of our target birds. This will allow us to better link and grow existing conservation efforts and better design new ones. This framework will also help promote an adaptive management approach to range-wide strategic conservation planning and implementation and facilitate the scaled monitoring of our conservation investments and achievements based on specific habitat and bird population objectives.

FIGURES AND TABLES

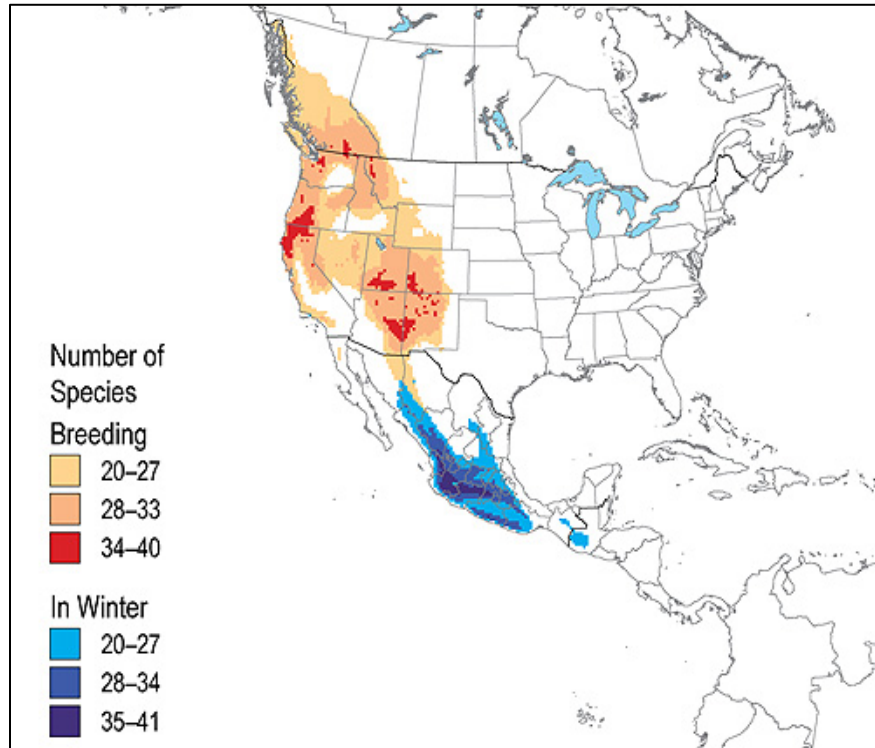


Figure 1. The breeding and overwintering distribution ranges of the migratory birds that breed in North America's temperate western forests and winter in the forests of western Mexico and northern Central America (Berlanga et al. 2010).

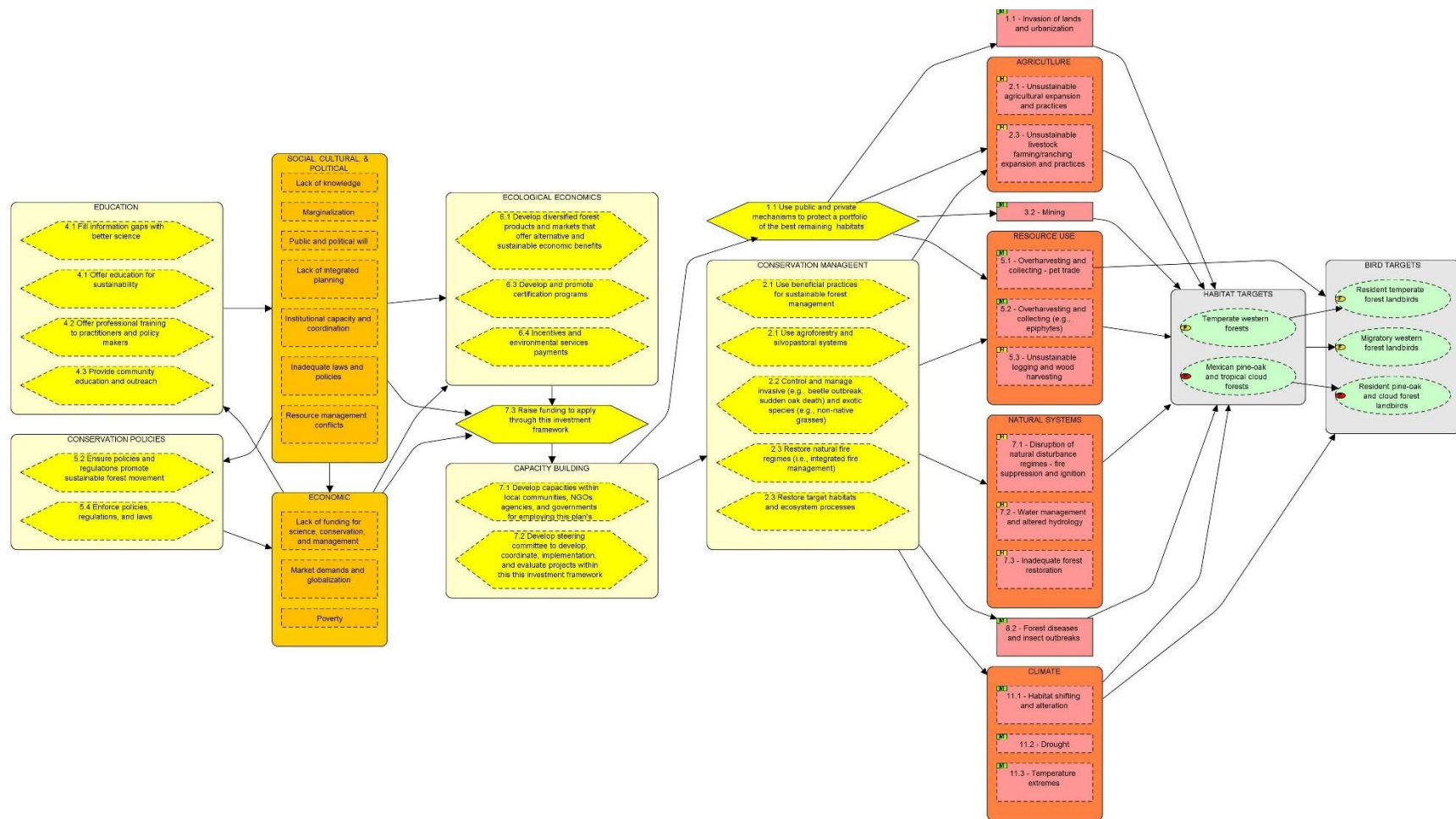


Figure 2. Conceptual model illustrating relationships among the strategies (yellow hexagons; Table 4), contributing factors (orange rectangles; Table 3), direct threats (pink rectangles, Table 2), and target habitats and species (green ovals; APPENDICES A and B, Table 1) that make up the elements of a conservation investment framework for saving western forest landbirds.

Table 1. Target species that are listed as “at greatest risk of extinction” in *Saving Our Shared Birds* (Berlanga et al. 2010) or are listed as “Watch List Species” in *State of the North American Birds 2016* (NABCI 2016).

| At the greatest risk of extinction | | | | Watch List Species | | | |
|------------------------------------|--|---|---|---------------------------------|--|--|---|
| Scientific Name | Common Name (English/Spanish) | Breeding Habitat(s) | Non-breeding Habitat(s) | Scientific Name | Common Name (English/Spanish) | Breeding Habitats | Non-breeding Habitats |
| <i>Oreophasis derbianus</i> | Horned Guan / Pavón Cornudo | Tropical cloud forest | Tropical cloud forest | <i>Dendragapus fuliginosus</i> | Sooty Grouse / Gallo fuliginoso | Temperate western forest | Temperate western forest |
| <i>Dendrortyx barbatus</i> | Bearded Wood-Partridge / Codorniz Coluda Veracruzana | Tropical cloud forest | Tropical cloud forest | <i>Patagioenas fasciata</i> | Band-tailed Pigeon / Paloma Encinera | Temperate western forest; Mexican pine-oak forest; Cloud forest | Mexican pine-oak forest |
| <i>Gymnogyps californianus</i> | California Condor / Cóndor Californiano | Chaparral; Temperate western forest | Chaparral; Temperate western forest | <i>Cypseloides niger</i> | Black Swift / Vencejo Negro | Temperate western forest; Mexican pine-oak forest; Mexican highland forest | Forest generalist |
| <i>Megascops barbarus</i> | Bearded Screech-Owl / Tecolote Barbudo | Mexican highland forest; Mexican pine-oak forest | Mexican highland forest; Mexican pine-oak forest | <i>Selasphorus rufus</i> | Rufous Hummingbird / Zumbador Canelo | Temperate western forest | Mexican pine-oak forest; Mexican highland forest |
| <i>Glaucidium sanchezi</i> | Tamaulipas Pygmy-Owl / Tecolote Tamaulipeco | Tropical cloud forest | Tropical cloud forest | <i>Brachyramphus marmoratus</i> | Marbled Murrelet / Alca Marmoleada | Temperate western forest; Coastal marine; Coastal cliffs and island | Coastal marine |
| <i>Aegolius ridgwayi</i> | Unspotted Saw-whet Owl / Tecolote Oyamelero Sureño | Mexican pine-oak forest | Mexican pine-oak forest | <i>Strix occidentalis</i> | Spotted Owl / Búho Moteado | Temperate western forest; Mexican highland forest | Temperate western forest; Mexican highland forest |
| <i>Melanerpes formicivorus</i> | Acorn Woodpecker / Carpintero Bellotero | Mexican pine-oak forest; Temperate western forest | Mexican pine-oak forest; Temperate western forest | <i>Melanerpes lewis</i> | Lewis's Woodpecker / Carpintero de Lewis | Temperate western forest | Temperate western forest |

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| | | | |
|---------------------------------------|--|-----------------------------|--|
| <i>Campephilus imperialis</i> | Imperial Woodpecker / Carpintero Imperial | Mexican pine- oak forest | Mexican pine-oak forest |
| <i>Rhynchopsitta pachyrhyncha</i> | Thick-billed Parrot / Cotorra Serrana Occidental | Mexican pine- oak forest | Mexican pine-oak forest |
| <i>Rhynchopsitta terrisi</i> | Maroon-fronted Parrot / Cotorra Serrana Oriental | Mexican pine- oak forest | Mexican pine-oak forest |
| <i>Cyanolyca mirabilis</i> | White-throated Jay / Chara Garganta Blanca | Tropical cloud forest | Tropical cloud forest |
| <i>Cyanolyca nana</i> | Dwarf Jay / Chara Enana | Tropical cloud forest | Tropical cloud forest |
| <i>Cyanocorax dickeyi</i> | Tufted Jay / Chara Pinta | Mexican pine- oak forest | Mexican pine-oak forest |
| <i>Setophaga chrysoparia</i> | Golden-cheeked Warbler / Chipecachetes Amarillos | Temperate eastern forest | Mexican pine-oak forest; Mexican highland forest |
| <i>Cardellina versicolor</i> | Pink-headed Warbler / Chipecachetes Rosado | Tropical cloud forest | Tropical cloud forest |
| <i>Tangara cabanisi</i> | Azure-rumped Tanager / Tangara Chiapaneca | Tropical cloud forest | Tropical cloud forest |

| | | | |
|--------------------------------------|---|-----------------------------|--|
| <i>Vireo vicinior</i> | Gray Vireo / Vireo Gris | Temperate western forest | Desert scrub |
| <i>Gymnorhinus cyanocephalus</i> | Pinyon Jay / Chara Piñonera | Temperate western forest | Temperate western forest |
| <i>Aphelocoma insularis</i> | Island Scrub-Jay / Chara de Santa Cruz | Temperate western forest | Temperate western forest |
| <i>Baeolophus inornatus</i> | Oak Titmouse / Carbonero Encinero | Temperate western forest | Temperate western forest |
| <i>Haemorhous cassinii</i> | Cassin's Finch / Pinzón Serrano | Temperate western forest | Temperate western forest |
| <i>Oreothlypis virginiae</i> | Virginia's Warbler / Chipecachetes de Virginia | Temperate western forest | Tropical dry forest; Mexican pine-oak forest |

Table 2. Threats (i.e., contributing factors) rated based on an assessment of each threat's impact on the temperate, pine-oak, and/or tropical cloud forest habitat targets and/or target birds that inhabit these habitats. Threats are classified using a standard lexicon (Conservation Measures Partnership 2020)

| Threats Classification | Direct Threat | Threat Rating | |
|--|--|---------------|--------|
| 1. Residential & Commercial Development | | | |
| 1.1 Housing & Urban Areas | | | |
| | Invasion of lands and urbanization | 2 | MEDIUM |
| 2. Agriculture & Aquaculture | | | |
| 2.1 Annual & Perennial Non-Timber Crops | | | |
| | Unsustainable agricultural expansion and practices | 1 | HIGH |
| 2.3 Livestock Farming & Ranching | | | |
| | Unsustainable livestock farming/ranching expansion and practices | 1 | HIGH |
| 3. Energy Production & Mining | | | |
| 3.2 Mining & Quarrying | | | |
| | Mining | 2 | MEDIUM |
| 3.3 Renewable Energy | | | |
| | Wind energy | 3 | *LOW |
| 4. Transportation & Service Corridors | | | |
| 4.1 Roads & Railroads | | | |
| | Transportation infrastructure | 3 | LOW |
| 5. Biological Resource Use | | | |
| 5.1 Hunting & Collecting Terrestrial Animals | | | |
| | Overharvesting and collecting of birds (pet trade) | 2 | MEDIUM |
| 5.2 Gathering Terrestrial Plants | | | |
| | Overharvesting and collecting (e.g., epiphytes) | 2 | MEDIUM |
| 5.3 Logging & Wood Harvesting | | | |
| | Unsustainable logging and wood harvesting | 1 | HIGH |
| 6. Human Intrusions & Disturbance | | | |
| 6.3 Work & Other Activities | | | |
| | Narcotraffic disturbance and human safety | 3 | LOW |
| 7. Natural System Modifications | | | |
| 7.1 Fire & Fire Suppression | | | |
| | Disruption of natural disturbance regimes (i.e. fire -- fire suppression and ignition) | 1 | HIGH |
| 7.2 Dams & Water Management / Use | | | |
| | Water management and altered hydrology | 1 | HIGH |
| 7.3 Other Ecosystem Modifications | | | |
| | Inadequate forest restoration | 1 | HIGH |

| Threats Classification | Direct Threat | Threat Rating | |
|--|--|---------------|--------|
| 8. Invasive & Problematic Species, Pathogens & Genes | | | |
| 8.1 Invasive Non-Native / Alien Plants & Animals | | | |
| | Invasive and exotic species | 3 | LOW |
| 8.2 Problematic Native Plants & Animals | | | |
| | Overabundant native species | 3 | LOW |
| | Forest diseases and insect outbreaks | 2 | MEDIUM |
| 9. Pollution | | | |
| 9.1 Household Sewage & Urban Waste Water | | | |
| | Household sewage and urban waste water | 3 | *LOW |
| 9.3 Agricultural & Forestry Effluents | | | |
| | Agricultural, forestry, and mining effluents | 3 | LOW |
| 10. Geological Events | | | |
| 10.1 Volcanoes | | | |
| | Volcanic emissions | 3 | LOW |
| 10.2 Earthquakes / Tsunamis | | | |
| | Earthquakes | 3 | LOW |
| 10.3 Avalanches / Landslides | | | |
| | Landslides | 3 | LOW |
| 11. Climate Change | | | |
| 11.1 Ecosystem Encroachment | | | |
| | Habitat shifting and alteration | 2 | MEDIUM |
| 11.3 Changes in Temperature Regimes | | | |
| | Drought | 2 | MEDIUM |
| | Temperature extremes | 2 | MEDIUM |
| 11.4 Changes in Precipitation & Hydrological Regimes | | | |
| | Flooding | 3 | LOW |
| 11.5 Severe / Extreme Weather Events | | | |
| | Storms | 3 | LOW |

Table 3. Contributing factors that underlie or lead to one or more direct threats that degrade the temperate, pine-oak, and/or tropical cloud forest habitat targets and/or impact the target birds that inhabit these habitats.

| | |
|--|---|
| Economic | |
| | Lack of funding for science, conservation, and management |
| | Market demands and globalization |
| | Poverty |
| Social, Cultural, and Political | |
| | Inadequate laws and policies |
| | Resource management conflicts |
| | Public and political will |
| | Institutional capacity and coordination |
| | Lack of knowledge |
| | Lack of integrated planning |
| | Marginalization |

Table 4. Strategies for addressing direct threats, and related contributing factors, that degrade the temperate, pine-oak, and/or tropical cloud forest habitat targets and/or impact the target birds that inhabit these habitats. Strategies are classified using a standard lexicon (Conservation Measures Partnership 2020).

| CMP Conservation Action Classification Levels 1 and 2 | Strategies |
|--|---|
| 1. Land/water management | |
| 1.1 Site/Area Stewardship | 1.1.A. Use beneficial practices for sustainable forest management 1.1.B. Use agroforestry and silvopastoral systems 1.1.C. Control and manage invasive (e.g., beetle outbreak, sudden oak death) and exotic species (e.g., non-native grasses) |
| 1.2 Ecosystem & Natural Process (Re)Creation | 1.2.A. Restore natural fire regimes (i.e., integrated fire management) 1.2.B. Restore target habitats and ecosystem processes |
| 3. Awareness Raising | |
| 3.1 Outreach & Communications | 3.1.A. Provide community education and outreach |
| 4. Law Enforcement & Prosecution | |
| 4.1 Detection & Arrest | 4.1.A. Enforce policies, regulations, and laws |
| 5. Livelihood, Economic & Moral Incentives | |
| 5.1 Linked Enterprises & Alternative Livelihoods | 5.1.A. Develop diversified forest products and markets that offer alternative and sustainable economic benefits |
| 5.3 Market-Based Incentives | 5.3.A. Develop and promote certification programs |
| 5.4 Direct Economic Incentives | 5.4.A. Incentives and environmental services payments |
| 6. Conservation Designation & Planning | |
| 6.1 Protected Area Designation &/or Acquisition | 6.1.A. Use public and private mechanisms to protect a portfolio of the best remaining habitats |

| CMP Conservation Action Classification Levels 1 and 2 | Strategies |
|--|--|
| 7. Legal & Policy Frameworks | |
| 7.2 Policies & Guidelines | A. Ensure policies and regulations promote sustainable forest movements |
| 8. Research & Monitoring | |
| 8.1 Basic Research & Status Monitoring | 8.1.A. Fill information gaps with better science |
| 9. Education & Training | |
| 9.2 Training & Individual Capacity Development | 9.2.A. Offer professional training practitioners and policy makers |
| 10. Institutional Development | |
| 10.2 External Organizational Development & Support | 10.2.A. Develop capacities within local communities, NGOs, agencies, and governments for employing this plan's strategies |
| 10.3 Alliance & Partnership Development | 10.3.A. Develop steering committee to develop, coordinate, implementation, and evaluate projects within this investment framework |
| 10.4 Financing Conservation | 10.4.A. Raise funding for conservation planning, implementation, and monitoring |

APPENDIX A. One hundred sixteen target species that primarily occur in target habitats during breeding and/or non-breeding seasons. Target species are recognized as species of conservation concern in *Saving Our Shared Birds* (n=45; Berlanga et al. 2010) and/or *State of the North American Birds 2016* (n=119; NABCI 2016). Some target species are also recognized as focal/indicator species (see Table 2) that are representative of target habitat conditions (Altman 2000a, 2000b, 2000c; Altman and Alexander 2012; Altman and Stephens 2012; CalPIF 2002a, 2002b; Contreras-Martínez et al. 2015; Macías Caballero et al. 2015, RHJV 2004, and SEMARNAT 2016).

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|------------------------------|---|--|--|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Penelopina nigra</i> | Highland Guan / Pajuil | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Oreophasis derbianus</i> | Horned Guan / Pavón Cornudo | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | | |
| <i>Dendrortyx barbatus</i> | Bearded Wood-Partridge / Codorniz Coluda Veracruzana | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | X | |
| <i>Dendrortyx macroura</i> | Long-tailed Wood-Partridge / Codorniz Coluda Transvolcánica | Mexican pine-oak forest; Mexican highland forest | Mexican pine-oak forest; Mexican highland forest | Tropical resident of tri-national concern | X | | X |
| <i>Dendrortyx leucophrys</i> | Buff-crowned Wood-Partridge / Codorniz Coluda Centroamericana | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Cyrtonyx ocellatus</i> | Ocellated Quail / Codorniz Ocelada | Mexican highland forest; Mexican pine-oak | Mexican highland forest; Mexican pine-oak | | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|--------------------------------|---|---|--|-------------------------|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Dactylortyx thoracicus</i> | Singing Quail / Codorniz Silbadora | Tropical cloud forest; Tropical evergreen forest | Tropical cloud forest; Tropical evergreen forest | | X | | X |
| <i>Dendragapus fuliginosus</i> | Sooty Grouse / Gallo fuliginoso | Temperate western forest | Temperate western forest | | X | X | |
| <i>Patagioenas fasciata</i> | Band-tailed Pigeon / Paloma Encinera | Temperate western forest; Mexican pine-oak forest; Cloud forest | Mexican pine-oak forest | | X | X | |
| <i>Claravis mondetoura</i> | Maroon-chested Ground-Dove / T—rtola Pecho Morado | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Zentrygon albifacies</i> | White-faced Quail-Dove / Paloma Cara Blanca | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Nyctiphrynus mcleodii</i> | Eared Poorwill / Tapacaminos Pr'o | Mexican pine-oak forest | Mexican pine-oak forest | | X | | |
| <i>Antrostomus arizonae</i> | Mexican Whip-poor-will / Tapacaminos Cuerporru'n Mexicano | Mexican pine-oak forest | Mexican pine-oak forest | | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-----------------------------------|---|--|--|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Cypseloides niger</i> | Black Swift / Vencejo Negro | Temperate western forest; Mexican pine-oak forest; Mexican highland forest | Forest generalist | Temperate breeder of tri-national concern | X | X | |
| <i>Streptoprocne semicollaris</i> | White-naped Swift / Vencejo Nuca Blanca | Mexican pine-oak forest; Tropical dry forest | Mexican pine-oak forest; Tropical dry forest | | X | | |
| <i>Lampornis viridipallens</i> | Green-throated Mountain-gem / Colibr' Garganta Verde | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Lampornis amethystinus</i> | Amethyst-throated Hummingbird / Colibr' Garganta Amatista | Mexican highland forest; Tropical cloud forest | Mexican highland forest; Tropical cloud forest | | X | | X |
| <i>Lamprolaima rhami</i> | Garnet-throated Hummingbird / Colibr' Multicolor | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | X |
| <i>Doricha enicura</i> | Slender Sheartail / Colibr' Tijereta Guatemalteco | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Tilmatura dupontii</i> | Sparkling-tailed Hummingbird / Colibr' Cola Pinta | Mexican pine-oak forest | Mexican pine-oak forest | | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-----------------------------------|---|--|--|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Atthis heloisa</i> | Bumblebee Hummingbird / Zumbador Mexicano | Mexican pine-oak forest; Mexican highland forest; Cloud forest | Mexican pine-oak forest; Mexican highland forest; Cloud forest | | X | | X |
| <i>Atthis ellioti</i> | Wine-throated Hummingbird / Zumbador Guatemalteco | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Selasphorus rufus</i> | Rufous Hummingbird / Zumbador Canelo | Temperate western forest | Mexican pine-oak forest; Mexican highland forest | | X | X | |
| <i>Selasphorus sasin</i> | Allen's Hummingbird / Zumbador de Allen | Chaparral | Mexican pine-oak forest; Mexican highland forest | | X | X | |
| <i>Abeillia abeillei</i> | Emerald-chinned Hummingbird / Colibrí Pico Corto | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Campylopterus rufus</i> | Rufous Sabrewing / Fandanguero Canelo | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Campylopterus hemileucurus</i> | Violet Sabrewing / Fandanguero Morado | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Eupherusa eximia</i> | Stripe-tailed Hummingbird / | Tropical cloud forest | Tropical cloud forest | | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|---------------------------------|--|---|---|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| | Colibrí Cola Rayada | | | | | | |
| <i>Eupherusa cyanophrys</i> | Blue-capped Hummingbird / Colibrí Miahuatleco | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Eupherusa poliocerca</i> | White-tailed Hummingbird / Colibrí Guerrerense | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Brachyramphus marmoratus</i> | Marbled Murrelet / Alca Marmoleada | Temperate western forest; Coastal marine; Coastal cliffs and island | Coastal marine | | X | X | |
| <i>Gymnogyps californianus</i> | California Condor / C—ndor Californiano | Chaparral; Temperate western forest | Chaparral; Temperate western forest | At greatest risk of extinction | | | |
| <i>Spizaetus ornatus</i> | Ornate Hawk-Eagle / çguila Elegante | Tropical evergreen forest; Tropical dry forest; Mexican pine-oak | Tropical evergreen forest; Tropical dry forest; Mexican pine-oak | Tropical resident of tri-national concern | X | X | X |
| <i>Buteogallus solitarius</i> | Solitary Eagle / çguila Solitaria | Mexican highland forest; Mexican pine-oak forest; Tropical cloud forest | Mexican highland forest; Mexican pine-oak forest; Tropical cloud forest | Tropical resident of tri-national concern | X | | X |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | Target Species | | Focal and/or Indicator Species | |
|-----------------------------|--|---|---|---|-------------------------|--------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Megascops trichopsis</i> | Whiskered Screech-Owl / Tecolote R'tmico | Mexican pine-oak forest | Mexican pine-oak forest | | X | | |
| <i>Megascops barbarus</i> | Bearded Screech-Owl / Tecolote Barbudo | Mexican highland forest; Mexican pine-oak forest | Mexican highland forest; Mexican pine-oak forest | At greatest risk of extinction | X | | X |
| <i>Glaucidium sanchezi</i> | Tamaulipas Pygmy-Owl / Tecolote Tamaulipeco | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | | |
| <i>Strix occidentalis</i> | Spotted Owl / Bøho Moteado | Temperate western forest; Mexican highland forest | Temperate western forest; Mexican highland forest | Temperate breeder of tri-national concern | X | X | X |
| <i>Strix fulvescens</i> | Fulvous Owl / Bøho Leonado | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Aegolius ridgwayi</i> | Unspotted Saw-whet Owl / Tecolote Oyamelero Sure—o | Mexican pine-oak forest | Mexican pine-oak forest | At greatest risk of extinction | X | | |
| <i>Trogon mexicanus</i> | Mountain Trogon / Coa Mexicana | Mexican pine-oak forest; Cloud forest | Mexican pine-oak forest; Cloud forest | | X | | |
| <i>Euptilotis neoxenus</i> | Eared Quetzal / Quetzal Orej—n | Mexican pine-oak forest | Mexican pine-oak forest | Tropical resident of tri-national concern | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|--------------------------------|---|---|---|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Pharomachrus mocinno</i> | Resplendent Quetzal / Quetzal Mesoamericano | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | | |
| <i>Aspatha gularis</i> | Blue-throated Motmot / Momoto Garganta Azul | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Aulacorhynchus prasinus</i> | Emerald Toucanet / Tucancillo Verde | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Melanerpes lewis</i> | Lewis's Woodpecker / Carpintero de Lewis | Temperate western forest | Temperate western forest | | X | X | |
| <i>Melanerpes formicivorus</i> | Acorn Woodpecker / Carpintero Bellotero | Mexican pine-oak forest; Temperate western forest | Mexican pine-oak forest; Temperate western forest | At greatest risk of extinction | | X | |
| <i>Colaptes auricularis</i> | Gray-crowned Woodpecker / Carpintero Corona Gris | Tropical dry forest; Tropical cloud forest | Tropical dry forest; Tropical cloud forest | Tropical resident of tri-national concern | | | |
| <i>Picoides arizonae</i> | Arizona Woodpecker / Carpintero de Arizona | Mexican pine-oak forest | Mexican pine-oak forest | | X | | X |
| <i>Picoides stricklandi</i> | Strickland's Woodpecker / Carpintero Transvolcánico | Mexican pine-oak forest | Mexican pine-oak forest | | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|--|--|---|---|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Campephilus imperialis</i> | Imperial Woodpecker / Carpintero Imperial | Mexican pine-oak forest | Mexican pine-oak forest | At greatest risk of extinction | X | | |
| <i>Rhynchopsitta pachyrhyncha</i> | Thick-billed Parrot / Cotorra Serrana Occidental | Mexican pine-oak forest | Mexican pine-oak forest | At greatest risk of extinction | X | X | |
| <i>Rhynchopsitta terrisi</i> | Maroon-fronted Parrot / Cotorra Serrana Oriental | Mexican pine-oak forest | Mexican pine-oak forest | At greatest risk of extinction | X | | |
| <i>Bolborhynchus lineola</i> | Barred Parakeet / Periquito Barrado | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Grallaria guatemalensis</i> | Scaled Antpitta / Hormiguero Cholino Escamoso | Tropical cloud forest; Mexican highland forest; Tropical evergreen forest | Tropical cloud forest; Mexican highland forest; Tropical evergreen forest | | X | X | |
| <i>Dendrocolaptes picumnus</i> | Black-banded Woodcreeper / Trepatroncos Viente Barrado | Mexican highland forest; Tropical cloud forest | Mexican highland forest; Tropical cloud forest | Tropical resident of tri-national concern | X | | |
| <i>Xiphocolaptes promeropyrhynchus</i> | Strong-billed Woodcreeper / Trepatroncos Gigante | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Xiphorhynchus erythropygius</i> | Spotted Woodcreeper / Trepatroncos Moteado | Tropical cloud forest | Tropical cloud forest | | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-----------------------------------|---|--|--|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Lepidocolaptes affinis</i> | Spot-crowned Woodcreeper / Trepatroncos Corona Punteada | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Anabacerthia variegaticeps</i> | Scaly-throated Foliage-gleaner / Musguero Trepador | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Clibanornis rubiginosus</i> | Ruddy Foliage-gleaner / Musguero Castaño | Tropical cloud forest; Tropical evergreen forest | Tropical cloud forest; Tropical evergreen forest | | X | | |
| <i>Contopus cooperi</i> | Olive-sided Flycatcher / Papamoscas Boreal | Boreal forest; Temperate western forest | Tropical highland forest | Temperate breeder of tri-national concern | | X | |
| <i>Empidonax flavescens</i> | Yellowish Flycatcher / Papamoscas Amarillo Sureño | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Vireolanius melitophrys</i> | Chestnut-sided Shrike-Vireo / Vireo—n Arlequín | Mexican pine-oak forest | Mexican pine-oak forest | | X | X | |
| <i>Vireo vicinior</i> | Gray Vireo / Vireo Gris | Temperate western forest | Desert scrub | | X | | |
| <i>Vireo leucophrys</i> | Brown-capped Vireo / Vireo Gorra Caf  | Tropical cloud forest | Tropical cloud forest | | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|----------------------------------|--|--------------------------|--------------------------|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Cyanolyca mirabilis</i> | White-throated Jay / Chara Garganta Blanca | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | X | |
| <i>Cyanolyca nana</i> | Dwarf Jay / Chara Enana | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | X | |
| <i>Cyanolyca pumilo</i> | Black-throated Jay / Chara de Niebla | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | | |
| <i>Cyanolyca cucullata</i> | Azure-hooded Jay / Chara Gorro Azul | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Cyanocorax dickeyi</i> | Tufted Jay / Chara Pinta | Mexican pine-oak forest | Mexican pine-oak forest | At greatest risk of extinction | X | | |
| <i>Gymnorhinus cyanocephalus</i> | Pinyon Jay / Chara Piñonera | Temperate western forest | Temperate western forest | Temperate breeder of tri-national concern | X | | |
| <i>Aphelocoma insularis</i> | Island Scrub-Jay / Chara de Santa Cruz | Temperate western forest | Temperate western forest | | X | | |
| <i>Aphelocoma ultramarina</i> | Transvolcanic Jay / Chara Transvolcánica | Mexican pine-oak forest | Mexican pine-oak forest | | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|---------------------------------|---|--|--|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Aphelocoma unicolor</i> | Unicolored Jay / Chara Unicolor | Tropical cloud forest | Tropical cloud forest | | X | | X |
| <i>Progne sinaloae</i> | Sinaloa Martin / Golondrina Sinaloense | Mexican pine-oak forest | Generalist | Tropical resident of tri-national concern | X | | |
| <i>Poecile sclateri</i> | Mexican Chickadee / Carbonero Mexicano | Mexican highland forest; Mexican pine-oak forest | Mexican highland forest; Mexican pine-oak forest | | X | | |
| <i>Baeolophus inornatus</i> | Oak Titmouse / Carbonero Encinero | Temperate western forest | Temperate western forest | | X | X | |
| <i>Notiochelidon pileata</i> | Black-capped Swallow / Golondrina Gorra Negra | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Troglodytes rufociliatus</i> | Rufous-browed Wren / Saltapared Cejas Canela | Tropical cloud forest | Tropical cloud forest | | X | | X |
| <i>Campylorhynchus gularis</i> | Spotted Wren / Matraca Serrana | Mexican pine-oak forest | Mexican pine-oak forest | | X | | |
| <i>Campylorhynchus jocosus</i> | Boucard's Wren / Matraca del Balsas | Mexican pine-oak forest; Tropical dry forest | Mexican pine-oak forest; Tropical dry forest | | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-------------------------------|---|--|--|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Henicorhina leucophrys</i> | Gray-breasted Wood-Wren / Saltapared Pecho Gris | Tropical cloud forest; Mexican highland forest | Tropical cloud forest; Mexican highland forest | | X | | |
| <i>Myadestes unicolor</i> | Slate-colored Solitaire / Clar'n Unicolor | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | | |
| <i>Catharus occidentalis</i> | Russet Nightingale-Thrush / Zorzal Mexicano | Mexican pine-oak forest | Mexican pine-oak forest | | X | X | |
| <i>Catharus frantzii</i> | Ruddy-capped Nightingale-Thrush / Zorzal de Frantzius | Tropical cloud forest; Mexican highland forest | Tropical cloud forest; Mexican highland forest | | X | | |
| <i>Catharus mexicanus</i> | Black-headed Nightingale-Thrush / Zorzal Corona Negra | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | | |
| <i>Catharus dryas</i> | Spotted Nightingale-Thrush / Zorzal Pecho Amarillo | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Turdus infuscatus</i> | Black Thrush / Mirlo Negro | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Turdus plebejus</i> | Mountain Thrush / Mirlo Serrano | Tropical cloud forest | Tropical cloud forest | | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|---------------------------------|--|---|---|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Turdus rufitorques</i> | Rufous-collared Robin / Mirlo Cuello Canela | Tropical cloud forest; Mexican highland forest | Tropical cloud forest; Mexican highland forest | | X | | |
| <i>Ridgwayia pinicola</i> | Aztec Thrush / Mirlo Azteca | Mexican pine-oak forest; Tropical cloud forest | Mexican pine-oak forest; Tropical cloud forest | | X | X | |
| <i>Melanotis hypoleucus</i> | Blue-and-white Mockingbird / Mulato Pecho Blanco | Tropical cloud forest; Tropical dry forest | Tropical cloud forest; Tropical dry forest | | X | X | |
| <i>Toxostoma ocellatum</i> | Ocellated Thrasher / Cuicacoche Moteado | Mexican pine-oak forest; Desert scrub | Mexican pine-oak forest; Desert scrub | | X | | |
| <i>Chlorophonia occipitalis</i> | Blue-crowned Chlorophonia / Clorofonia Corona Azul | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Euphonia elegantissima</i> | Elegant Euphonia / Eufonia Gorra Azul | Mexican pine-oak forest; Tropical dry forest; Tropical cloud forest | Mexican pine-oak forest; Tropical dry forest; Tropical cloud forest | | X | | |
| <i>Coccothraustes abeillei</i> | Hooded Grosbeak / Picogrueso Encapuchado | Mexican highland forest; Tropical cloud forest | Mexican highland forest; Tropical cloud forest | Tropical resident of tri-national concern | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-----------------------------|--|--|--|-------------------------|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Haemorhous cassinii</i> | Cassin's Finch / Pinz—n Serrano | Temperate western forest | Temperate western forest | | X | X | |
| <i>Spinus atriceps</i> | Black-capped Siskin / Jilguerito Corona Negra | Tropical cloud forest; Mexican pine-oak forest | Tropical cloud forest; Mexican pine-oak forest | | X | | |
| <i>Spinus notatus</i> | Black-headed Siskin / Jilguerito Encapuchado | Mexican pine-oak forest; Tropical cloud forest | Mexican pine-oak forest; Tropical cloud forest | | X | | |
| <i>Arremon virenticeps</i> | Green-striped Brush-Finch / Rascador Cejas Verdes | Mexican pine-oak forest; Mexican highland forest | Mexican pine-oak forest; Mexican highland forest | | X | | |
| <i>Arremon brunneinucha</i> | Chestnut-capped Brush-Finch / Rascador Gorra Casta—a | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Pipilo ocai</i> | Collared Towhee / Rascador de Collar | Mexican pine-oak forest | Mexican pine-oak forest | | X | | |
| <i>Atlapetes albinucha</i> | White-naped Brush-Finch / Rascador Nuca Blanca | Tropical cloud forest | Tropical cloud forest | | X | | |
| <i>Icterus abeillei</i> | Black-backed Oriole / Calandria Flancos Negros | Mexican highland forest | Mexican highland forest; Mexican pine-oak | | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | Target Species | | Focal and/or Indicator Species | |
|------------------------------|---|--|--|--------------------------------|-------------------------|--------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Oreothlypis crissalis</i> | Colima Warbler / Chipe de Colima | Mexican pine-oak forest | Mexican pine-oak forest; Mexican highland forest | | X | | |
| <i>Oreothlypis virginiae</i> | Virginia's Warbler / Chipe de Virginia | Temperate western forest | Tropical dry forest; Mexican pine-oak forest | | X | | |
| <i>Setophaga chrysoparia</i> | Golden-cheeked Warbler / Chipe Cachetes Amarillos | Temperate eastern forest | Mexican pine-oak forest; Mexican highland forest | At greatest risk of extinction | X | | X |
| <i>Basileuterus belli</i> | Golden-browed Warbler / Chipe Cejas Doradas | Mexican pine-oak forest; Tropical cloud forest | Mexican pine-oak forest; Tropical cloud forest | | X | | |
| <i>Cardellina rubra</i> | Red Warbler / Chipe Rojo | Mexican pine-oak forest; Mexican highland forest | Mexican pine-oak forest; Mexican highland forest | | X | | |
| <i>Cardellina versicolor</i> | Pink-headed Warbler / Chipe Rosado | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | X | X |
| <i>Piranga bidentata</i> | Flame-colored Tanager / Piranga Dorso Rayado | Mexican pine-oak forest | Mexican pine-oak forest | | X | X | |
| <i>Piranga leucoptera</i> | White-winged Tanager / Piranga Alas Blancas | Tropical cloud forest | Tropical cloud forest | | X | | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Scientific Name | Common Name | Breeding Habitats | Non-breeding Habitats | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-------------------------------|---|--|--|---|-------------------------|---------------------------------------|-----------------------|
| | | | | Saving our Shared Birds | State of the Birds 2016 | Breeding Habitats | Non-breeding Habitats |
| <i>Piranga erythrocephala</i> | Red-headed Tanager / Piranga Cabeza Roja | Mexican pine-oak forest; Tropical cloud forest | Mexican pine-oak forest; Tropical cloud forest | | X | X | |
| <i>Haplospiza rustica</i> | Slaty Finch / Semillero Pizarra | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Tangara cabanisi</i> | Azure-rumped Tanager / Tangara Chiapaneca | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | | |

APPENDIX B. One-hundred forty-eight focal/indicator species that are recognized as representative of target habitat conditions during breeding (n=297) and/or non-breeding (n=29) seasons by Altman (2000a, 2000b, 2000c), Altman and Alexander (2012), Altman and Stephens (2012), CalPIF (2002a, 2002b), Contreras-Martínez et al. (2015), Macías Caballero et al. (2015), RHJV (2004), and SEMARNAT (2016). Some focal/indicator species are also target species [Table 1; i.e., species of conservation concern based on *Saving Our Shared Birds* (Berlanga et al. 2010) and/or *State of the North American Birds 2016* (NABCI 2016)].

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|------------------------------|---|--|--|---|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Penelopina nigra</i> | Highland Guan / Pajuil | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Oreortyx pictus</i> | Mountain Quail / Codorniz de Monta-a | Temperate western forest | Temperate western forest | | | X | |
| <i>Dendrortyx barbatus</i> | Bearded Wood-Partridge / Codorniz Coluda Veracruzana | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | X | |
| <i>Dendrortyx macroura</i> | Long-tailed Wood-Partridge / Codorniz Coluda Transvolc-nica | Mexican pine-oak forest; Mexican highland forest | Mexican pine-oak forest; Mexican highland forest | Tropical resident of tri-national concern | X | | X |
| <i>Dendrortyx leucophrys</i> | Buffy-crowned Wood-Partridge / Codorniz Coluda Centroamerican a | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Cyrtonyx montezumae</i> | Montezuma Quail / Codorniz de Moctezuma | Mexican pine-oak forest; Tropical grassland | Mexican pine-oak forest; Tropical grassland | | | | X |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Target Species</u> | | | | <u>Focal and/or Indicator Species</u> | |
|--------------------------------|--|---|---|---|--------------------------------|---------------------------------------|------------------------------|
| | | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Dactylortyx thoracicus</i> | Singing Quail / Codorniz Silbadora | Tropical cloud forest; Tropical evergreen forest | Tropical cloud forest; Tropical evergreen forest | | X | | X |
| <i>Bonasa umbellus</i> | Ruffed Grouse / GrŽvol Engolado | Boreal forest; Temperate eastern forest; Temperate western forest | Boreal forest; Temperate eastern forest; Temperate western forest | | | X | |
| <i>Dendragapus fuliginosus</i> | Sooty Grouse / Gallo fuliginoso | Temperate western forest | Temperate western forest | | X | X | |
| <i>Patagioenas fasciata</i> | Band-tailed Pigeon / Paloma Encinera | Temperate western forest; Mexican pine-oak forest; Cloud forest | Mexican pine-oak forest | | X | X | |
| <i>Zentrygon carrikeri</i> | Tuxtla Quail-Dove / Paloma Tuxtla-a | Tropical evergreen forest; Tropical cloud forest | Tropical evergreen forest; Tropical cloud forest | | | X | |
| <i>Coccyzus americanus</i> | Yellow-billed Cuckoo / Cuculillo Pico Amarillo | Temperate eastern forest; Tropical dry forest; Temperate western forest | Tropical dry forest; Tropical evergreen forest | | | X | |
| <i>Cypseloides niger</i> | Black Swift / Vencejo Negro | Temperate western forest; Mexican pine-oak forest; | Forest generalist | Temperate breeder of tri-national concern | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Target Species</u> | | | | <u>Focal and/or Indicator Species</u> | |
|-------------------------------|---|--|--|---|--------------------------------|---------------------------------------|------------------------------|
| | | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| | | Mexican highland forest | | | | | |
| <i>Chaetura vauxi</i> | Vaux's Swift / Vencejo de Vaux | Temperate western forest; Mexican highland forest; Tropical dry forest | Generalist | | | X | |
| <i>Colibri thalassinus</i> | Green Violetear / Colibr' Orejas Violetas | Mexican highland forest; Mexican pine-oak | Mexican highland forest; Mexican pine-oak | | | | X |
| <i>Lampornis amethystinus</i> | Amethyst-throated Hummingbird / Colibr' Garganta Amatista | Mexican highland forest; Tropical cloud forest | Mexican highland forest; Tropical cloud forest | | X | | X |
| <i>Lamprolaima rhami</i> | Garnet-throated Hummingbird / Colibr' Multicolor | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | X |
| <i>Doricha enicura</i> | Slender Sheartail / Colibr' Tijereta Guatemalteco | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Calypte anna</i> | Anna's Hummingbird / Colibr' Cabeza Roja | Chaparral; Temperate western forest | Chaparral; Temperate western forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Target Species</u> | | | | <u>Focal and/or Indicator Species</u> | |
|--------------------------------|---|--|--|---|--------------------------------|---------------------------------------|------------------------------|
| | | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Atthis heloisa</i> | Bumblebee Hummingbird / Zumbador Mexicano | Mexican pine-oak forest; Mexican highland forest; Cloud forest | Mexican pine-oak forest; Mexican highland forest; Cloud forest | | X | | X |
| <i>Atthis ellioti</i> | Wine-throated Hummingbird / Zumbador Guatemalteco | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Selasphorus platycercus</i> | Broad-tailed Hummingbird / Zumbador Cola Ancha | Temperate western forest; Mexican pine-oak forest | Mexican pine-oak forest | | | X | |
| <i>Selasphorus rufus</i> | Rufous Hummingbird / Zumbador Canelo | Temperate western forest | Mexican pine-oak forest; Mexican highland forest | | X | X | |
| <i>Selasphorus sasin</i> | Allen's Hummingbird / Zumbador de Allen | Chaparral | Mexican pine-oak forest; Mexican highland forest | | X | X | |
| <i>Selasphorus calliope</i> | Calliope Hummingbird / Zumbador Garganta Rayada | Temperate western forest | Mexican pine-oak forest | | | X | |
| <i>Abeillia abeillei</i> | Emerald-chinned Hummingbird / Colibr' Pico Corto | Tropical cloud forest | Tropical cloud forest | | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|---------------------------------|---|---|---|---|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Eupherusa eximia</i> | Stripe-tailed Hummingbird / Colibrí Cola Rayada | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Eupherusa cyanophrys</i> | Blue-capped Hummingbird / Colibrí Miahuatleco | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Thalurania ridgwayi</i> | Mexican Woodnymph / Ninfa Mexicana | Tropical dry forest; Tropical cloud forest | Tropical dry forest; Tropical cloud forest | | | | X |
| <i>Brachyramphus marmoratus</i> | Marbled Murrelet / Alca Marmoleada | Temperate western forest; Coastal marine; Coastal cliffs and island | Coastal marine | | X | X | |
| <i>Spizaetus ornatus</i> | Ornate Hawk-Eagle / çguila Elegante | Tropical evergreen forest; Tropical dry forest; Mexican pine-oak | Tropical evergreen forest; Tropical dry forest; Mexican pine-oak | Tropical resident of tri-national concern | X | X | X |
| <i>Buteogallus solitarius</i> | Solitary Eagle / çguila Solitaria | Mexican highland forest; Mexican pine-oak forest; Tropical cloud forest | Mexican highland forest; Mexican pine-oak forest; Tropical cloud forest | Tropical resident of tri-national concern | X | | X |
| <i>Buteo lineatus</i> | Red-shouldered Hawk / Aguillilla Pecho Rojo | Temperate eastern forest; Temperate western forest | Temperate eastern forest; Temperate western forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-------------------------------|--|---|---|---|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Buteo albonotatus</i> | Zone-tailed Hawk / Aguillilla Aura | Mexican pine-oak forest; Temperate western forest | Forest generalist | | | X | |
| <i>Psiloscoops flammeolus</i> | Flammulated Owl / Tecolote Ojos Oscuros | Temperate western forest; Mexican pine-oak forest | Mexican pine-oak forest | | | X | |
| <i>Megascops kennicottii</i> | Western Screech-Owl / Tecolote del Oeste | Temperate western forest; Desert scrub | Temperate western forest; Desert scrub | | | X | |
| <i>Megascops barbarus</i> | Bearded Screech-Owl / Tecolote Barbudo | Mexican highland forest; Mexican pine-oak forest | Mexican highland forest; Mexican pine-oak forest | At greatest risk of extinction | X | | X |
| <i>Glaucidium gnoma</i> | Northern Pygmy-Owl / Tecolote Serrano | Temperate western forest; Mexican pine-oak forest | Temperate western forest; Mexican pine-oak forest | | | X | |
| <i>Glaucidium palmarum</i> | Colima Pygmy-Owl / Tecolote Colimense | Tropical dry forest; Mexican pine-oak forest | Tropical dry forest; Mexican pine-oak forest | | | X | |
| <i>Strix occidentalis</i> | Spotted Owl / Bœho Moteado | Temperate western forest; Mexican highland forest | Temperate western forest; Mexican highland forest | Temperate breeder of tri-national concern | X | X | X |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|--------------------------------|---|--|--|---|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Strix fulvescens</i> | Fulvous Owl / Boëho Leonado | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Asio stygius</i> | Stygian Owl / Boëho Cara Oscura | Mexican pine-oak forest; Tropical cloud forest | Mexican pine-oak forest; Tropical cloud forest | | | | X |
| <i>Aspatha gularis</i> | Blue-throated Motmot / Momoto Garganta Azul | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Melanerpes lewis</i> | Lewis's Woodpecker / Carpintero de Lewis | Temperate western forest | Temperate western forest | | X | X | |
| <i>Melanerpes formicivorus</i> | Acorn Woodpecker / Carpintero Bellotero | Mexican pine-oak forest; Temperate western forest | Mexican pine-oak forest; Temperate western forest | At greatest risk of extinction | | X | |
| <i>Sphyrapicus thyroideus</i> | Williamson's Sapsucker / Carpintero Elegante | Temperate western forest | Temperate western forest; Mexican pine-oak forest | | | X | |
| <i>Sphyrapicus nuchalis</i> | Red-naped Sapsucker / Carpintero Nuca Roja | Temperate western forest | Temperate western forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|--|--|---|---|---|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Picoides arcticus</i> | Black-backed Woodpecker / Pico grito | Boreal forest; Temperate western forest | Boreal forest; Temperate western forest | | | X | |
| <i>Dryocopus pileatus</i> | Pileated Woodpecker / Picamaderos Norteamericano | Temperate eastern forest; Temperate western forest | Temperate eastern forest; Temperate western forest | | | X | |
| <i>Rhynchopsitta pachyrhyncha</i> | Thick-billed Parrot / Cotorra Serrana Occidental | Mexican pine-oak forest | Mexican pine-oak forest | At greatest risk of extinction | X | X | |
| <i>Grallaria guatemalensis</i> | Scaled Antpitta / Hormiguero Cholino Escamoso | Tropical cloud forest; Mexican highland forest; Tropical evergreen forest | Tropical cloud forest; Mexican highland forest; Tropical evergreen forest | | X | X | |
| <i>Xiphocolaptes promeropirhynchus</i> | Strong-billed Woodcreeper / Trepatorncos Gigante | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Xiphorhynchus erythropygius</i> | Spotted Woodcreeper / Trepatorncos Moteado | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Rhynchocyclus brevirostris</i> | Eye-ringed Flatbill / Mosquerito Pico Plano | Tropical evergreen forest; Tropical cloud forest | Tropical evergreen forest; Tropical cloud forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|----------------------------------|--|--|--|---|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Myiarchus cinerascens</i> | Ash-throated Flycatcher / Papamoscas Cenizo | Desert scrub; Desert riparian; Temperate western forest | Tropical dry forest; Desert scrub | | | X | |
| <i>Myiodynastes luteiventris</i> | Sulphur-bellied Flycatcher / Papamoscas Rayado Comœn | Mexican pine-oak forest; Tropical dry forest | Tropical evergreen forest | | | X | |
| <i>Tyrannus vociferans</i> | Cassin's Kingbird / Tirano Chibioœ | Mexican pine-oak forest; Temperate western forest | Generalist; Agricultural | | | X | |
| <i>Contopus cooperi</i> | Olive-sided Flycatcher / Papamoscas Boreal | Boreal forest; Temperate western forest | Tropical highland forest | Temperate breeder of tri-national concern | | X | |
| <i>Contopus sordidulus</i> | Western Wood-Pewee / Papamoscas del Oeste | Temperate western forest; Mexican pine-oak forest | Tropical highland forest | | | X | |
| <i>Empidonax traillii</i> | Willow Flycatcher / Papamoscas Saucero | Temperate eastern forest; Temperate western forest | Tropical dry forest; Tropical evergreen forest | | | X | |
| <i>Empidonax albigularis</i> | White-throated Flycatcher / Papamoscas Garganta Blanca | Mexican pine-oak forest; Tropical dry forest; Freshwater marsh | Mexican pine-oak forest; Tropical dry forest; Freshwater marsh | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|--------------------------------|---|---|---|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Empidonax hammondi</i> | Hammond's Flycatcher / Papamoscas de Hammond | Temperate western forest | Mexican pine-oak forest; Mexican highland forest | | | X | |
| <i>Empidonax wrightii</i> | Gray Flycatcher / Papamoscas Bajacolina | Temperate western forest | Desert scrub; Tropical dry forest | | | X | |
| <i>Empidonax difficilis</i> | Pacific-slope Flycatcher / Papamoscas Amarillo del Pacífico | Temperate western forest | Tropical dry forest | | | X | |
| <i>Empidonax flavescens</i> | Yellowish Flycatcher / Papamoscas Amarillo Sureño | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Empidonax fulvifrons</i> | Buff-breasted Flycatcher / Papamoscas Pecho Canela | Mexican pine-oak forest; Mexican highland forest | Mexican pine-oak forest; Mexican highland forest | | | X | |
| <i>Vireolanius melitophrys</i> | Chestnut-sided Shrike-Vireo / Vireo Arlequín | Mexican pine-oak forest | Mexican pine-oak forest | | X | X | |
| <i>Vireo huttoni</i> | Hutton's Vireo / Vireo Reyazuelo | Temperate western forest; Mexican pine-oak forest | Temperate western forest; Mexican pine-oak forest | | | X | |
| <i>Vireo cassinii</i> | Cassin's Vireo / Vireo de Cassin | Temperate western forest | Tropical dry forest; Mexican pine-oak forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Target Species</u> | | | | <u>Focal and/or Indicator Species</u> | |
|-------------------------------|--|---|--|---|--------------------------------|---------------------------------------|------------------------------|
| | | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Vireo gilvus</i> | Warbling Vireo / Vireo Gorjeador | Temperate eastern forest; Temperate western forest | Tropical dry forest | | | X | |
| <i>Vireo olivaceus</i> | Red-eyed Vireo / Vireo Ojos Rojos | Temperate eastern forest; Boreal forest; Temperate western forest | Tropical evergreen forest | | | X | |
| <i>Cyanolyca mirabilis</i> | White-throated Jay / Chara Garganta Blanca | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | X | |
| <i>Cyanolyca nana</i> | Dwarf Jay / Chara Enana | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | X | |
| <i>Cyanolyca cucullata</i> | Azure-hooded Jay / Chara Gorro Azul | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Cyanocitta stelleri</i> | Steller's Jay / Chara Copetona | Temperate western forest; Mexican pine-oak forest | Temperate western forest; Mexican pine-oak forest | | | X | |
| <i>Aphelocoma californica</i> | Western Scrub-Jay / Chara de Collar | Temperate western forest; Mexican pine-oak forest | Temperate western forest; Mexican pine-oak forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|------------------------------|--|---|---|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Aphelocoma unicolor</i> | Unicolored Jay / Chara Unicolor | Tropical cloud forest | Tropical cloud forest | | X | | X |
| <i>Nucifraga columbiana</i> | Clark's Nutcracker / Cascanueces Americano | Temperate western forest | Temperate western forest | | | X | |
| <i>Pica nuttalli</i> | Yellow-billed Magpie / Urraca de Nuttall | Temperate western forest | Temperate western forest | | | X | |
| <i>Poecile atricapillus</i> | Black-capped Chickadee / Carbonero Cabecinegro | Temperate eastern forest; Boreal forest; Temperate western forest | Temperate eastern forest; Boreal forest; Temperate western forest | | | X | |
| <i>Baeolophus wollweberi</i> | Bridled Titmouse / Carbonero Embridado | Mexican pine-oak forest | Mexican pine-oak forest | | | X | |
| <i>Baeolophus inornatus</i> | Oak Titmouse / Carbonero Encinero | Temperate western forest | Temperate western forest | | X | X | |
| <i>Psaltiriparus minimus</i> | Bushtit / Sastrecillo | Temperate western forest; Mexican pine-oak forest | Temperate western forest; Mexican pine-oak forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|---------------------------------|--|---|---|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Sitta canadensis</i> | Red-breasted Nuthatch / Bajapalos Pecho Canela | Boreal forest; Temperate western forest; Temperate eastern forest | Forest generalist | | | X | |
| <i>Sitta carolinensis</i> | White-breasted Nuthatch / Bajapalos Pecho Blanco | Temperate eastern forest; Temperate western forest; Mexican pine-oak forest | Temperate eastern forest; Temperate western forest; Mexican pine-oak forest | | | X | |
| <i>Sitta pygmaea</i> | Pygmy Nuthatch / Bajapalos Enano | Temperate western forest; Mexican pine-oak forest | Temperate western forest; Mexican pine-oak forest | | | X | |
| <i>Certhia americana</i> | Brown Creeper / Trepadorcito Americano | Forest generalist; Temperate western forest; Mexican pine-oak | Forest generalist: Mexican pine-oak | | | X | |
| <i>Troglodytes rufociliatus</i> | Rufous-browed Wren / Saltapared Cejas Canela | Tropical cloud forest | Tropical cloud forest | | X | | X |
| <i>Troglodytes pacificus</i> | Pacific Wren / Saltapared Cholino del Oeste | Temperate western forest | Temperate western forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Target Species</u> | | | | <u>Focal and/or Indicator Species</u> | |
|--------------------------------|--|--|---|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Thryomanes bewickii</i> | Bewick's Wren / Saltapared Cola Larga | Desert scrub; Chaparral; Temperate western forest | Desert scrub; Chaparral; Temperate western forest | | | X | |
| <i>Campylorhynchus jocosus</i> | Boucard's Wren / Matraca del Balsas | Mexican pine-oak forest; Tropical dry forest | Mexican pine-oak forest; Tropical dry forest | | X | X | |
| <i>Regulus satrapa</i> | Golden-crowned Kinglet / Reyezuelo Corona Amarilla | Boreal forest; Temperate western forest; Temperate eastern forest; Mexican highland forest | Forest generalist | | | X | |
| <i>Sialia sialis</i> | Eastern Bluebird / Azulejo Garganta Canela | Temperate eastern forest; Mexican pine-oak forest | Temperate eastern forest; Mexican pine-oak | | | X | |
| <i>Sialia mexicana</i> | Western Bluebird / Azulejo Garganta Azul | Temperate western forest; Mexican pine-oak forest | Temperate western forest; Desert scrub | | | X | |
| <i>Myadestes townsendi</i> | Townsend's Solitaire / Clarín Norte-o | Temperate western forest; Mexican pine-oak forest | Temperate western forest; Mexican pine-oak forest | | | X | |
| <i>Catharus aurantirostris</i> | Orange-billed Nightingale-Thrush / Zorzal Pico Naranja | Mexican pine-oak forest; Tropical dry forest | Mexican pine-oak forest; Tropical dry forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|------------------------------|--|---|---|---|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Catharus occidentalis</i> | Russet Nightingale-Thrush / Zorzal Mexicano | Mexican pine-oak forest | Mexican pine-oak forest | | X | X | |
| <i>Catharus frantzii</i> | Ruddy-capped Nightingale-Thrush / Zorzal de Frantzii | Tropical cloud forest; Mexican highland forest | Tropical cloud forest; Mexican highland forest | | X | | X |
| <i>Catharus dryas</i> | Spotted Nightingale-Thrush / Zorzal Pecho Amarillo | Tropical cloud forest | Tropical cloud forest | | X | X | |
| <i>Catharus fuscescens</i> | Veery / Zorzal Canelo | Temperate eastern forest; Boreal forest; Temperate western forest | Tropical evergreen forest | | | X | |
| <i>Catharus ustulatus</i> | Swainson's Thrush / Zorzal de Antejos | Boreal forest; Temperate western forest | Tropical evergreen forest; Tropical highland forest | | | X | |
| <i>Catharus guttatus</i> | Hermit Thrush / Zorzal Cola Canela | Temperate eastern forest; Boreal forest; Temperate western forest | Forest generalist | | | X | |
| <i>Turdus infuscatus</i> | Black Thrush / Mirlo Negro | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

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|-----------------------------|--|---|---|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Turdus assimilis</i> | White-throated Thrush / Mirlo Garganta Blanca | Mexican highland forest; Tropical cloud forest | Mexican highland forest; Tropical cloud forest | | | X | |
| <i>Ixoreus naevius</i> | Varied Thrush / Mirlo Cinchado | Temperate western forest; Boreal forest | Temperate western forest | | | X | |
| <i>Ridgwayia pinicola</i> | Aztec Thrush / Mirlo Azteca | Mexican pine-oak forest; Tropical cloud forest | Mexican pine-oak forest; Tropical cloud forest | | X | X | |
| <i>Melanotis hypoleucus</i> | Blue-and-white Mockingbird / Mulato Pecho Blanco | Tropical cloud forest; Tropical dry forest | Tropical cloud forest; Tropical dry forest | | X | X | |
| <i>Ptiliogonys cinereus</i> | Gray Silky-flycatcher / Capulinero Gris | Mexican pine-oak forest; Mexican highland forest; Tropical cloud forest | Mexican pine-oak forest; Mexican highland forest; Tropical cloud forest | | | X | |
| <i>Haemorhous purpureus</i> | Purple Finch / Pinz—n Colorado | Boreal forest; Temperate western forest; Temperate eastern forest | Temperate eastern forest; Temperate western forest | | | X | |
| <i>Haemorhous cassinii</i> | Cassin's Finch / Pinz—n Serrano | Temperate western forest | Temperate western forest | | X | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

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|----------------------------------|---|---|--|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Spinus pinus</i> | Pine Siskin / Jilguerito Pinero | Boreal forest; Temperate western forest; Mexican pine- oak forest | Forest generalist | | | X | |
| <i>Chlorospingus flavopectus</i> | Common Chlorospingus / Chinchinero Comœn | Tropical cloud forest | Tropical cloud forest | | | X | |
| <i>Passerella iliaca</i> | Fox Sparrow / Gorri—n Rascador | Boreal forest; Temperate western forest | Generalist | | | X | |
| <i>Junco hyemalis</i> | Dark-eyed Junco / Junco Ojos Negros | Boreal forest; Temperate western forest; Temperate eastern forest | Generalist | | | X | |
| <i>Junco phaeonotus</i> | Yellow-eyed Junco / Junco Ojos de Lumbre | Mexican highland forest; Mexican pine- oak forest | Mexican highland forest; Mexican pine- oak forest | | | X | |
| <i>Melospiza lincolnii</i> | Lincoln's Sparrow / Gorri—n de Lincoln | Boreal forest; Temperate western forest | Generalist | | | X | |
| <i>Pipilo maculatus</i> | Spotted Towhee / Rascador Moteado | Temperate western forest; Mexican pine- oak forest | Forest generalist | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|---------------------------|---|---|--|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Atlapetes pileatus</i> | Rufous-capped Brush-Finch / Rascador Gorra Canela | Mexican pine-oak forest; Mexican highland forest | Mexican pine-oak forest; Mexican highland forest | | | X | |
| <i>Icteria virens</i> | Yellow-breasted Chat / Chipe Grande | Temperate eastern forest; Temperate western forest | Tropical dry forest; Tropical evergreen forest | | | X | |
| <i>Icterus bullockii</i> | Bullock's Oriole / Calandria Cejas Naranjas | Temperate western forest; Mexican pine-oak forest | Tropical dry forest; Mexican pine-oak forest | | | X | |
| <i>Icterus abeillei</i> | Black-backed Oriole / Calandria Flancos Negros | Mexican highland forest | Mexican highland forest; Mexican pine-oak | | X | X | |
| <i>Geothlypis tolmiei</i> | MacGillivray's Warbler / Chipe Lores Negros | Temperate western forest | Tropical dry forest; Mexican pine-oak forest | | | X | |
| <i>Setophaga petechia</i> | Yellow Warbler / Chipe Amarillo | Temperate eastern forest; Boreal forest; Temperate western forest | Generalist | | | X | |
| <i>Setophaga coronata</i> | Yellow-rumped Warbler / Chipe Rabadilla Amarilla | Boreal forest; Temperate western forest; Temperate eastern forest | Generalist | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-------------------------------|---|---|---|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Setophaga nigrescens</i> | Black-throated Gray Warbler / Chipe Negrogris | Temperate western forest; Mexican pine-oak forest | Tropical dry forest; Mexican pine-oak forest | | | X | |
| <i>Setophaga townsendi</i> | Townsend's Warbler / Chipe de Townsend | Temperate western forest; Boreal forest | Mexican pine-oak forest; Mexican highland forest | | | X | |
| <i>Setophaga occidentalis</i> | Hermit Warbler / Chipe Cabeza Amarilla | Temperate western forest | Mexican pine-oak forest; Mexican highland forest | | | | X |
| <i>Setophaga chrysoparia</i> | Golden-cheeked Warbler / Chipe Cachetes Amarillos | Temperate eastern forest | Mexican pine-oak forest; Mexican highland forest | At greatest risk of extinction | X | | X |
| <i>Cardellina pusilla</i> | Wilson's Warbler / Chipe Corona Negra | Boreal forest; Temperate western forest | Forest generalist | | | X | |
| <i>Cardellina versicolor</i> | Pink-headed Warbler / Chipe Rosado | Tropical cloud forest | Tropical cloud forest | At greatest risk of extinction | X | X | X |
| <i>Myioborus miniatus</i> | Slate-throated Redstart / Pavito Alas Negras | Mexican pine-oak forest; Mexican highland forest; Tropical cloud forest | Mexican pine-oak forest; Mexican highland forest; Tropical cloud forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|----------------------------------|--|---|--|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Piranga flava</i> | Hepatic Tanager / Piranga Encinera | Mexican pine-oak forest | Mexican pine-oak forest | | | X | |
| <i>Piranga ludoviciana</i> | Western Tanager / Piranga Capucha Roja | Temperate western forest | Tropical dry forest; Mexican pine-oak forest | | | X | |
| <i>Piranga bidentata</i> | Flame-colored Tanager / Piranga Dorso Rayado | Mexican pine-oak forest | Mexican pine-oak forest | | X | X | |
| <i>Piranga erythrocephala</i> | Red-headed Tanager / Piranga Cabeza Roja | Mexican pine-oak forest; Tropical cloud forest | Mexican pine-oak forest; Tropical cloud forest | | X | X | |
| <i>Pheucticus melanocephalus</i> | Black-headed Grosbeak / Picogordo Tigrillo | Temperate western forest; Mexican pine-oak forest | Tropical dry forest; Mexican pine-oak forest | | | X | |
| <i>Passerina caerulea</i> | Blue Grosbeak / Picogordo Azul | Temperate eastern forest; Tropical dry forest; Temperate western forest | Tropical dry forest; Agricultural | | | X | |
| <i>Passerina amoena</i> | Lazuli Bunting / Color'n Pecho Canela | Temperate western forest | Tropical dry forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|--|---|---|---|---|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Haplospiza rustica</i> | Slaty Finch / Semillero Pizarra | Tropical cloud forest | Tropical cloud forest | Tropical resident of tri-national concern | X | X | |
| <i>Accipiter striatus chionogaster</i> | Sharp-shinned Hawk (Chaipas) / Gavilán Pecho Blanco | Mexican highland forest: Mexican pine-oak | Mexican highland forest: Mexican pine-oak | | | | X |
| <i>Oreothlypis celata</i> | Orange-crowned Warbler / Chipe Oliváceo | Temperate western forest; Boreal forest | Generalist | | | X | |
| <i>Oreothlypis ruficapilla</i> | Nashville Warbler / Chipe Cabeza Gris | Boreal forest; Temperate western forest; Temperate eastern forest | Forest generalist | | | X | |
| <i>Picoides albolarvatus</i> | White-headed Woodpecker / Pico Cabeciblanco | Temperate western forest | Temperate western forest | | | X | |
| <i>Picoides arizonae</i> | Arizona Woodpecker / Carpintero de Arizona | Mexican pine-oak forest | Mexican pine-oak forest | | X | | X |
| <i>Picoides nuttallii</i> | Nuttall's Woodpecker / Carpintero Californiano | Temperate western forest | Temperate western forest | | | X | |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> | <u>Target Species</u> | | <u>Focal and/or Indicator Species</u> | |
|-----------------------------|---|---|------------------------------|--------------------------------|--------------------------------|---------------------------------------|------------------------------|
| | | | | <u>Saving our Shared Birds</u> | <u>State of the Birds 2016</u> | <u>Breeding Habitats</u> | <u>Non-breeding Habitats</u> |
| <i>Picoides pubescens</i> | Downy Woodpecker / Carpintero Albinegro Menor | Forest generalist; Temperate western forest | Forest generalist | | | X | |
| <i>Picoides stricklandi</i> | Strickland's Woodpecker / Carpintero Transvolcánico | Mexican pine-oak forest | Mexican pine-oak forest | | X | X | |
| <i>Picoides villosus</i> | Hairy Woodpecker / Carpintero Albinegro Mayor | Forest generalist; Temperate western forest | Forest generalist | | | X | X |

APPENDIX C. Participants of the Partners in Flight Conservation Business Plan Workshop held in Guadalajara, Mexico in April 2016.

| Participants | Country | Affiliation |
|--------------------------------|------------------|--|
| Alexser Vazquez Vazquez | México (Chiapas) | La Comisión Nacional de Áreas Naturales Protegidas (CONANP), Frontera Sur, Chiapas |
| Alvaro Moises Calderón | El Salvador | SalvaNatura |
| Ana Luisa Santiago | Mexico (Jalisco) | Universidad de Guadalajara CUCBA Depto. De Produccion Forestal |
| Andrew Rothman | USA | American Bird Conservancy |
| Antonio Ordorica Hermosillo | Mexico (Jalisco) | Director de conservacion y biodiversidad, Gobierno del Estado de Jalisco |
| Barbara Baltazar (Gloria) | Mexico (Chiapas) | Forest management, Pronatura Sur |
| Carol Beardmore | USA | Sonora Joint Venture, Tropical Deciduous Forest co-lead |
| César Rodríguez | Mexico Norte | Pronatura Noroeste |
| Christine Bishop | Canada | Environment and Climate Change Canada |
| Claudia Macias Caballero | Mexico (Chiapas) | Pronatura Sur |
| David Younkman | USA | Vice President, American Bird Conservancy |
| Eduardo Santana Castellón | Mexico (Jalisco) | Centro Universitario de la Costa Sur (CUCSUR) Coodinador General, Museo de Ciencias Ambientales, Centro Cultural Universitario, Universidad de Guadalajara (UDG) |
| Edwin Juarez | USA | Arizona State, Department of Game and Fish |
| Efrain Castillejos Castellanos | Mexico (Chiapas) | Pronatura Sur |
| Enrique Jardel Pelaez | Mexico (Jalisco) | CUCSUR,UDG |
| Eric Hernandez | Mexico (Chiapas) | Pronatura Sur |
| Eric Palola | Costa Rica | Guanacaste Dry Forest Conservation Fund |
| Erika Eloisa Martínez Martínez | Mexico (Jalisco) | Zoologico de Guadalajara |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Participants | Country | Affiliation |
|--|--|--|
| Fernando Gavito Pérez | Mexico (Jalisco) | Director de la Reserva de la Biosfera Sierra de Manantlán, CONANP |
| José Fernando Villaseñor Gómez | Mexico (Michoacan) | Sociedad para el Estudio y Conservación de las Aves en México A.C. (CIPAMEX) |
| Luz Francelia Torres González | Mexico Norte | Pronatura Noroeste |
| Georges Duriaux | Nicaragua | El Jaguar |
| Greg Butcher | USA | US Forest Service International Programs |
| Greg Levandoski | USA | Bird Conservancy of the Rockies |
| Humberto Berlanga | Mexico (DF) | CONABIO and NABCI MEXICO |
| Humberto Gabriel Reyes Gómez | Mexico (Nayarit, Jalisco, Colima, Michoacan) | Director Regional Occidente y Pacifico Centro, CONANP |
| Ingrid Anahí Tello López | Mexico (Jalisco) | Ingeniería en Recursos Naturales y Agropecuarios |
| Ingrig Arias | Guatemala | Foundation for Ecodevelopment and conservation |
| James Weigand | USA | California Sate Ecologist |
| Jay Carlisle | USA | Intermountain Bird Observatory |
| Jesus Juan Rosales Adame | Mexico (Jalisco) | Universidad de Guadalajara CUCSUR |
| John Alexander | USA | Klamath bird Observatory |
| Jorge Amador González | Mexico (Jalisco) | IRNA, UDG |
| Jorge Vega | Mexico (Jalisco) | Jefe de Estacion de Biologia Chamela UNAM |
| Jose Cruz Gomez Llamas | Mexico (Jalisco) | Reserva de la Biosfera Sierra de Manantlan CONANP |
| Juan Pablo Suazo Euceda | Honduras | Universidad Nacional de Agricultura Honduras |
| Julian David Martínez Martínez | Mexico (Jalisco) | Zoologico de Guadalajara |
| Julio Alejandro Alvarez Ruiz (guia de campo) | Mexico (Jalisco) | Club de observacion de aves Tortilla con Chile |

Saving birds of temperate western, Mexican pine-oak, and tropical cloud forests

| Participants | Country | Affiliation |
|-------------------------------------|------------------|--|
| Liliana Chauarria Duriaux | Nicaragua | El Jaguar |
| Luis Morales | Mexico (Nayarit) | San Pancho Bird Observatory |
| Lydia Lozano Angulo | Mexico (DF) | Tropical Deciduous Forest co-lead |
| Magdalena Ruiz Mejia | Mexico (Jalisco) | Secretaria del Medio Ambiente y Desarrollo Territorial |
| María Esther Quintero Rivero | Mexico (DF) | Subcoordinadora de especies prioritarias CONABIO |
| Maria de la Cruz Carrillo Rodríguez | Mexico (Jalisco) | Bosque La Primavera Area de Proteccion de Flora y Fauna |
| Manfred Meiners Ochoa | Mexico (Jalisco) | Nature and Conservation Photographer |
| Natalie Sánchez Ulate | Canada | Guanacaste and University of Edmonton |
| Orlando Jarquin | Nicaragua | Paso Pacifico |
| Pablo (Chespi) Elizondo | Costa Rica | Costa Rica Bird Observatories |
| Pilar Ibarra López | Mexico (Jalisco) | CUCSUR, UDG |
| Raquel Leonardo Monrique | Guatemala | Defensores de la naturaleza |
| Raúl Said Quintero Félix | Mexico (Jalisco) | Bosque La primavera Area de EcoProteccion de Flora y Fauna Kaban |
| Richard Huber | USA | Department of Sustainable Development, Organization of American States |
| Sandra Gallo Corona | Mexico | Intl. Advisor- Biosphere Soundscapes-United Nations Educational, Scientific and Cultural Organization (UNESCO) |
| Sarah Otterstrom | USA | Paso Pacifico |
| Sarahy Contreras Martínez | Mexico | CUCSUR, UDG |
| Silvia Anaite López Alquijay | Guatemala | Instituto Nacional de Bosques de Guatemala |
| Siux Eduardo Díaz Gomez | Mexico | Departamento de Ecología del Municipio de Autlán |
| Steve Albert | US | Institute for Bird Populations |

| Participants | Country | Affiliation |
|----------------------------|------------------|---|
| Vicente (Chente) Rodriguez | Mexico (DF) | Tropical Deciduous Forests co-lead |
| Viviana Ruiz-Gutierrez | Colombia EUA | Cornell Lab Ornithology |
| Xochitl de la Cruz Ornelas | Mexico (Jalisco) | Bosque La Primavera Area de Proteccion de Flora y Fauna |
| Yamel Rubio Rocha | Mexico (Sinaloa) | Fundación Sinaloense para la Conservación de la Biodiversidad, A.C. and profesora Universidad Autónoma de Sinaloa |

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