PREVOEW

Watch List

BY DAVID PASHLEY

Sixteen species of birds stand out as perhaps the highest under-recognized avian conservation priorities in the continental United States and Canada. This group of 16 is a preview of the final Watch List, the approximately 100 species ranked by Partners In Flight in the highest tiers of conservation

concern, behind those that are currently listed under the Endangered Species Act. Partners In Flight is not an independent organization, but rather a vehicle for bird conservation that is used by federal agencies, state wildlife agencies, non-governmental conservation organizations (including among others, the National Audubon Society, American Birding Association, American Bird Conservancy, Wildlife Management Institute), academicians, and private industry. Partners In Flight is a cooperative effort dedicated to the long-term well being of the birds of this continent and hemisphere, and the Watch List is an important tool developed to help achieve that goal. The full and final Watch List will appear in the next issue of National Audubon Society Field Notes and in an upcoming Partners In Flight publication. Brief discussions of the 16 species included here will illustrate how the system works and its implications for the future of bird conservation.



Bridging the Old and the New

With the advent of the Watch List, bird conservation has a powerful new tool, built on a solid foundation of citizen science, whereby all member organizations of Partners in Flight have the opportunity to implement wise land management practices for the habitats of all high priority birds of the Americas. It is the culmination of years of citizen-science cooperative efforts and holds great promise for the future of avian conservation.

Twenty-five years ago, when there was no list anywhere of bird species in trouble-apart from the Endangered Species List-the National Audubon Society published the "Blue List" in its periodical, American Birds. The Blue List was an "early warning system" that focused our attention on problem bird species. It included common and often widespread species appearing to suffer in all or parts of their range from non-cyclical population declines, but not of sufficient rarity to be considered endangered. It excluded species already designated as federally endangered. Blue List species signaled observers everywhere to send observations of these birds to American Birds' regional editors. These editors are authorities on the bird populations of their areas, and each communicates with hundreds of observers. Observers responses reflected the consensus of thousands of field experts. In itself, the Blue List couldn't prevent the decline of any species, but by focusing attention on problem species helped improve our understanding of their changing status, and alerted the scientific community, governmental agencies, and the general public to new situations that needed action.

Over years, the list withstood the tests of time and critical appraisal and showed remarkable stability. It acquired status and prestige and was the source and inspiration for the official list of threatened species issued by the United States Fish and Wildlife Service. It was adopted or adapted by concerned agencies both at federal and state levels.

As it became more refined, more data sets were included. Eventually, James Tate Jr., in his astute analyses of the Blue List in the 1980s, indicated that so many people were contributing to the process that full acknowledgment of each participant was impossible owing to space limitations. Last year, the Office of Migratory Bird Management of the U.S. Fish and Wildlife Service published a document entitled Migratory Nongame Birds of Management Concern in the United States: The 1995 List. Authored by John L. Trapp, it updated and revised the Blue List, as well as previously published federal lists. It reviewed all available data sources including the Breeding Bird Survey, Christmas Bird Count, and the Partners in Flight prioritized regional lists.

The thousands of regional editors and observers who made the Blue List and the "Trapp List" realities, can be proud of the part they played in the evolution of the Watch List.

-SUSAN RONEY DRENNAN

Conservation of birds is not a trivial pursuit. One of the complications is that it is often difficult to ascertain which species are in greatest need of conservation attention. Most of our birds have large ranges in which they occur rather sparsely and are hard to

census.

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Assessing Conservation Priorities

Birds have complex life cycles, particularly if they are long-distance migrants, and the relative severity of the many potential threats they face is difficult to assess. Even in situations in which it seems that conservation action is needed, we frequently do not know enough about the natural history and demographics of a species to recommend actions that are sure to succeed.

There have been efforts over the years to untangle the scientific data and anecdotal information regarding bird population status and threats and develop lists of species of conservation concern. The National Audubon Society Blue Lists were notable in this regard, as have been federal and state endangered and threatened species lists and the Heritage system pioneered by The Nature Conservancy, now used by many state wildlife agencies. These valuable efforts vary in process and results and none uses both an approach designed specifically for birds and the best available information. Some work better for narrowly distributed, sedentary organisms than for wide-ranging migratory species; some favor conservation of peripheral occurrences over work in the core of the range of a species; others stress charismatic or popularized species over more obscure ones. Because of these perceived deficiencies, Partners In Flight has developed a Species Prioritization Scheme to evaluate the status of all birds in all of the places they occur.

The Prioritization Scheme

Each species is evaluated on the basis of parameters that collectively establish its likelihood of extinction in the relatively near future. The abundance of a species where it occurs relative to the abundance of other species is one of these factors. A common species is less prone to extinction than one that is rare. The size of the range of a bird, both in breeding season and winter, is also considered. Range and relative abundance together make up a rough index of the number of individuals of a species. Population trend, as measured by the Breeding Bird Survey, Christmas Bird Counts, or other data sets, is another important parameter. The last measures considered are threats, defined as the loss of conditions necessary for survival and reproductive success, notably loss of habitat but also including such factors as pressure from cowbird parasitism. Threats include losses in the recent past, as well as those anticipated in the future, in both the breeding and non-breeding season.

Which Birds Are Considered?

The Watch List only includes full species as recognized by the American Ornithologists' Union. The Prioritization Scheme can easily be applied to subspecies or individual populations, and those involved in local conservation planning are encouraged to do so. The Watch List also excludes species that occur only peripherally in the continental United States and Canada. An exception to these two rules is made where there is a single, clearly disjunct subspecies of a more broadly distributed species in our area. Taxa that are federally listed under the Endangered Species Act generally have high scores in the Prioritization Scheme, but are not included in the Watch List. The Watch List does not currently include the birds of Hawaii, Puerto Rico and the Virgin Islands, Guam, *etc.* Their omission is based on a decision to focus on mainland species.

Physiographic Areas and Habitat Types

From a conservation perspective, the physiographic region is the most basic key conservation planning unit. There are roughly 66 physiographic areas described for the continental United States, based on interpretations of vegetative ecoregions as influenced by bird distribution. They have been created and defined to be biologically sensible and politically reasonable. Simply put, plant and bird species should be more similar to each other within those regions than between them.

Within each physiographic area, the prioritization scheme identifies breeding, wintering, and migratory species of concern. These species are grouped into species suites that co-occur in a habitat type and presumably react similarly to management or land-use practices. Partners In Flight sets conservation objectives in terms of the desired distribution and characteristics of the various habitat types of importance to these suites of high priority birds. Although the prioritization scheme ranks individual species, it is then used to set conservation objectives for shared habitats, and not as justification for single-species management.

The following featured species are each associated with a habitat type within a physiographic region. These may not be the bird's only habitat nor region. Indeed, there may be others in which the species is of equal priority. The places selected illustrate a range of conditions, reasons, and challenges involved in conservation planning.

• The Mountain Plover (*Charadrius montanus*) is, barely, the highest national priority among these 16 species. It is an uncommon bird, inhabiting small breeding and wintering ranges in which past and perceived threats are high, that has been undergoing a significant decline in population. It breeds in the same places as another high priority bird, McCown's Longspur, in the shortgrass prairie, one of our most neglected ecosystems. The shortgrass system is huge in expanse, stretching from Alberta to northern Mexico. However, it is not rich in species, and in its most lush grandeur the vegetation just reaches ankle height. The Mountain Plover, the "Ghost of the Prairie," may be the symbol needed to raise public awareness of this immense, forgotten, imperiled ecosystem.

Physiographic Area: Central Sho Habitat: Shortgrass

Central Shortgrass Prairie Shortgrass Prairie

2 The Swainson's Warbler (Limnothlypis swainsonii) ranks high because it is an uncommon bird, has a small breeding range and very small winter range, and uses habitat types that have been in substantial decline. All of this outweighs the fact that its population trend as detected by the Breeding Bird Survey is slightly positive. Future problems for this species may be particularly acute on its winter range, a narrow latitudinal swath from the Caribbean edge of the Yucatan peninsula eastward to the southern Bahamas, with the greatest concentration in Jamaica. The habitat preferred by this retiring birddense, low vegetation in forests-may continue to suffer reductions owing to growing human populations. Swainson's Warblers seem to migrate around both sides of the Gulf of Mexico to the thickets and tangles of bottomland and some upland forests of the Southeast where they breed. Although it may be locally common, it has a very patchy distribution in a small range. Because it is such a high priority species and tends to occur in lower densities than other important species in the same habitat, it is being used as an "umbrella species" in the Mississippi Alluvial Valley. It is assumed that providing a sufficient quantity of habitat for a given number of Swainson's Warblers will be satisfactory for a similar or greater number of individuals of the other bottomland hardwood species of concern.

Physiographic Area: Habitat:

Mississippi Alluvial Valley Bottomland Hardwood Forest

Within its breeding range, the decline of the **Golden-winged Warbler** (*Vermivora chrysoptera*) over recent decades has been associated with a combination of the succession of abandoned farms out of old-field stages into forest, high rates of cowbird parasitism, and perhaps with the expansion of Blue-winged Warblers. Population trends are decidedly negative, but we are tracking a period after its expansion into the Northeast in the previous century and perhaps a return to pre-European conditions. This illustrates the difficulty in picking a point in the past as a desired conservation target. Logging, fire, and other disturbances are tools that can be used to create greater quantities of preferred breeding habitat. Most Golden-winged Warblers winter on the Caribbean slope from Honduras to northwestern Venezuela. There they inhabit humid forests, most commonly at middle elevations, where they have frequently been observed foraging in dead leaf clusters. The small winter range and the precarious nature of tropical forests contribute to its high placement on the Watch List.

Physiographic Area: Boreal-Hardwood Transition Habitat: Early to Mid-Succession Fields, Edges, and Wetlands

With its recent full split from Gray-cheeked Thrush, **Bicknell's Thrush** (*Catharus bicknelli*) instantly became a species of great conservation concern. It has a very small breeding range, and its distribution within that range is limited to stunted mountaintop forest in northern New York and New England, as well as similar habitat (but sometimes lower in elevation) in southern Quebec and the Maritime provinces of Canada. The impacts of acid rain, recreational development, and other pressures in this area on Bicknell's Thrush are unknown, but there is reason for concern. Its winter range is very poorly known, but is probably limited to forested habitat on the larger islands of the Greater Antilles, notably Hispaniola. Loss of forest on Hispaniola ranges from almost complete on the Haitian side to severe in the Dominican Republic. The small ranges and potential threats push Bicknell's Thrush high on the Watch List, even though there is very little documentation concerning its population trend. As observers hone their skills in the identification of this cryptic species, new information on, for example, migration patterns will be of great importance in conservation planning.

Physiographic Area: Habitat:

Eastern Spruce-Hardwood Forest Sub-Alpine Forest





■ Many **Gray Vireos** (*Vireo vicinior*) spend the majority of their year in winter range around the Gulf of California in Sonora, Baja California, and barely into the southwest United States, seemingly tied to the distribution of an elephant tree (*Bursera microphylla*) whose fruits provide the birds sustenance for much of the season. This small winter range and specialization make the bird vulnerable, but pressures on that habitat are not currently considered extreme. They breed in open pinyon pine and juniper woodlands and similar chaparral habitats in a relatively small range in the Southwest. Even though trends and threats are moderate, the fact that this is a relatively uncommon bird occupying a relatively small range puts it on the Watch List as a reasonably high priority for conservation in those physiographic areas that provide the bulk of its habitat.

Physiographic Area: Habitat: Colorado Plateau Pinyon-Juniper

The Southeastern United States subspecies of the graceful **Swallow-tailed Kite** (*Elanoides forficatus*) is considered separate from the wider-ranging Central and South American subspecies for purposes of the Watch List. The breeding range of this bird in the United States shrank dramatically from 1880 to 1940, perhaps as a result of habitat loss and direct human persecution. The great majority of those that remain breed on the Florida peninsula, with disjunct pockets in South Carolina, Georgia, Alabama, Mississippi, Louisiana, and east Texas. It nests in loose colonies, and a dependence on colonies may limit its potential to hang onto or expand into suitable habitat. These kites persist where there are extremely large areas of forest, but forest that is diverse and not necessarily pristine. They often nest atop tall pines on the edges of swamp forests, and forage along edges and in open areas. They tend to form large pre-migratory communal roosts, and protection of these roost sites may be an important conservation goal. North American birds winter in the breeding range of the southern subspecies in northern South America, where their habits and welfare have not been distinguished from that of the resident birds.

Physiographic Area: Habitat: Peninsular Florida Pine Fringe of Floodplain Swamps

The Cerulean Warbler (Dendroica cerulea) is included because it ranks high in all categories. Its small winter range is centered in 3000 to 9000 foot elevations of the Andes in Peru and Ecuador, with smaller numbers in Colombia and a perhaps disjunct population in northwestern Venezuela. There it is found in humid forest habitat, often in gaps, second-growth, and shade coffee plantations. Its relatively small breeding range centers in the Ohio River basin, where it is probably most common in the Ohio Hills region of West Virginia, southwest Pennsylvania, and southern Ohio. There and elsewhere in its breeding range it occurs in large forested blocks or largely forested landscapes, particularly where taller trees protrude above the top of relatively mature canopy. It is an uncommon bird in most places it occurs, and its population trend has been steadily downward in recent years, with the steepest declines in the heart of its range. Ironically, in the midst of these declines, the bird has expanded its range to the northeast. Although conversion from forest to other land uses and forest fragmentation clearly harm Cerulean Warbler populations, evidence is accumulating that it can thrive in properly managed, economically productive woodlands.

Physiographic Area: Ohio Hills Habitat: Riparian Forest

Quality breeding habitat for Henslow's Sparrows (Ammodramus henslowii) consists of grasslands from a few to several years after a disturbance, when the grasses and herbs get rank and before woody vegetation becomes dominant. This was formerly provided on native tallgrass prairies, which are largely gone, and then in hayfields and pasture, much of which is now managed in ways not conducive to success of this bird. Almost one-half of the remaining breeding Henslow's Sparrows occur in the Upper and Lower Great Lakes Plain. They are everywhere in decline; populations on the East Coast (which have been described as a separate sub-species) are now either extirpated or severely threatened. These birds winter in the southeastern United States, again in habitats dominated by natural disturbances that have undergone serious reductions. It is possible that losses in fire-maintained southern pine wet grasslands and savannahs (primarily longleaf pine) have been damaging to Henslow's Sparrows, as have losses on breeding grounds. This is decidedly a species in trouble for which decisive conservation action is required.

Physiographic Area: Habitat: Upper Great Lakes Region Dense Grasslands • Even though its breeding habitat on the Arctic tundra appears to be relatively secure, **Buff-breasted Sandpipers** (*Tryngites subruficollis*) have not recovered from substantial declines suffered in the late 19th and early 20th centuries. Market hunting may have caused this initial drop, but habitat features apparently have since conspired to keep numbers down. Part of the problem may be replacement of native grasslands by agriculture on its wintering grounds on the pampas and chaco of Argentina, Uruguay, and Paraguay. Other problems may be encountered at stop-over sites on its incredibly long annual migratory journey. The Coastal Prairies of Texas and Louisiana are noted here as being among those key areas, but the entire stretch north from there through the Great Plains could be equally important. All along this route, Buff-breasted Sandpipers use higher and drier sites, where they may be subject to a different set of pressures, than habitats favored by other shorebirds.

Physiographic Area:	Coastal Prairie
Habitat:	Short, Dry Gra

O The **Hermit Warbler** (*Dendroica occidentalis*) is a year-round bird of western coniferous forests that ranks highly owing to its small range and some potential threats in the non-breeding season. It winters in pine-oak and higher pine-fir forests of the mountains of Mexico, from Jalisco in the west and San Luis Potosi in the east, south through Chiapas and into Guatemala and Honduras. These forests are still relatively extensive, but a rapidly growing human population and increasing pressures on the land and changes in land use in an area where there is very little effectively protected habitat poses a looming and substantial threat. It breeds in a small range in the mountains of Washington, Oregon, and California, where it is less renowned in the conservation arena than some co-occurring species, such as the Spotted Owl. Although it is less an old-growth specialist than the Spotted Owl, it is a bird to watch owing to its restricted range and the threats to the region's forests.

Physiographic Area:	Sierra Nevada
Habitat:	Coniferous Forest

• Populations of the elusive **Black Rail** (*Laterallus jamaicensis*) occur in small pockets sporadically from the Pacific to the Atlantic and from New England to Chile. Across this large range, however, the total amount of suitable and occupied habitat is small. Furthermore, the tidal marshes and freshwater wetlands in which it occurs have been and continue to be subjected to a wide range of pressures. The slightly higher and drier wetlands used by Black Rails are often the first to disappear. The San Francisco Bay population is featured here, but any of the East Coast or inland populations would be of equally high priority. The importance of this and other rallids dependent on managed wetlands underscores the need to integrate traditional waterfowl management with the requirements of other high priority birds into broad habitat or physiographic area conservation plans.

Physiographic Area: California Foothills Habitat: Tidal Saltmarsh

As a group, grassland birds, like the **Baird's Sparrow** (*Ammodramus bairdii*), are declining more consistently and precipitously than are birds of any other habitat type on the continent. In the heart of the Great Plains, the Northern Mixed Grass Prairie of the Dakotas, eastern Montana, and the prairie provinces of Canada, the Baird's Sparrow perhaps best exemplifies this decline. This bird does poorly on land that has been converted to agriculture, is heavily grazed, or has been invaded by woody vegetation. It prefers native prairie undergoing a natural disturbance regime, and that habitat has become scarce. Baird's Sparrows are poorly known on their winter range in the grasslands of the Southwest and northwestern Mexico, but the dramatic alterations of that landscape caused over the past century by overgrazing cannot be assumed to have been beneficial.

Physiographic Area: North Habitat: Nativ

Northern Mixed Grass Prairie Native Mixed Grass

The otherworldly beauty of the male **Painted Bunting** (*Passerina ciris*) may have, within its range, contributed more than any other sight to hooking beginning birders. Its presence on this Watch List may come as a surprise to some, but probably not to those who have seen hundreds of Painted Buntings crammed into cages for sale as pets in plazas throughout its winter range. Still, this direct persecution is probably minor compared to habitat-related problems. The bird is somewhat in decline in the western part of its United States range in the brushy thickets of Texas and adjoining states. The eastern population, breeding in the maritime forests of northeast Florida, Georgia, and the Car-





olinas, has undergone dramatic reductions and is one of the highest priority breeding species (along with Red-cockaded Woodpecker) in the Southern Atlantic Coastal Plain.

Physiographic Area: Habitat: South Atlantic Coastal Plain Maritime Forests

In the last 30 or so years, for reasons that are almost totally unknown, the world population of **Steller's Eider** (*Polysticta stelleri*) has fallen from close to one-half million to about 100,000. All of the remaining birds breed on the Arctic Coastal Plain near Barrow, Alaska, and in a narrow zone in eastern Siberia. Other former breeding populations have disappeared. The birds molt and winter along the coast of the Alaska Peninsula as well as in the southern Bering Sea along the Kamchatka coast. This is a species for which conservation concern is obviously warranted, but for which a considerable research effort and field work by birders must be expended before substantive conservation recommendations can be made.

Physiographic Area: Southwestern Alaska (winter) Habitat: Near-Shore Marine

■ Lawrence's Goldfinch (*Carduelis lawrencei*) is included on the Watch List in part because it has very small breeding and wintering ranges. Much of the former is in the foothills of southern California, where increasing human population and development pressure have been altering habitat for decades and continue to pose threats. Breeding Bird Survey data show a distinct negative population trend for Lawrence's Goldfinch, but there are questions as to whether this is an actual decline or an aberration caused by the bird's nomadic tendencies. This situation illustrates one of the many difficult existing monitoring challenges; others include determining the status of birds that are nocturnal (*i.e.*, owls or nightjars) or secretive (*i.e.*, rails) or habitats that are difficult to sample (*i.e.*, mountain tops, riparian strips, forest interiors).

Physiographic Area: Southern California Ranges Habitat: Riparian Woodlands

Many **Red Knots** (*Calidris canutus*) journey annually from the Arctic Circle to Tierra del Fuego and back. It is one of the many shorebird species that traverse incredible distances, following a stepping-stone of resource bursts from their breeding grounds to the southernmost stop of their annual journey, and then promptly back north again. Each of those stepping stones could be a critical link upon which virtually the entire species depends. The fear regarding this species is not that it is so low in number as to be critically imperiled, but that it is so dependent on so few places, the loss of one of which could devastate the entire species. The Red Knot could go out with a bang rather than a whimper. One of those key places is the shoreline of Delaware Bay, near some of the largest centers of human population in North America, where each May horseshoe crab eggs are gorged upon by most of the Red Knots in the hemisphere (as well as many of the Ruddy Turnstones and Semipalmated Sandpipers) during their northward spring migration. Conservation planning for the Mid-Atlantic Coastal Plain must make the well-being of these and other transients, present for the few short weeks each year, a very high priority.

Physiographic Area: Habitat: Mid-Atlantic Coastal Plain Intertidal Mudflats

The Meaning of the Watch List

This Watch List is national in scope. Regional lists under development will be more useful in setting priorities at smaller geographic scales. Prioritized lists of species and their habitats at the physiographic area level are ultimately the most useful tools in establishing conservation objectives.

We would all agree that it is desirable that as many species as possible remain sufficiently secure so that we see no diminution of common birds in the future. Through the development and implementation of wise and bird-friendly land-management practices for the habitats required by these 16 species—and all of the high priority birds of this continent—we can effect the goal of keeping common birds common. These practices must be investigated through research, popularized through outreach and education, supported through an adequate funding base and solid partnerships, strengthened through public and private policy, and evaluated through a rigorous program of monitoring. No one individual or organization can do all of these things in all of the places they are needed. Hope for success lies in the possibility that all of us, from Audubon to the forest products industry, from Point Barrow to Tierra del Fuego, will truly act as Partners In Flight. Υ