



Our Vulnerable Birds

The current and projected effects of climate change on the habitats of Washington's 74 Important Bird Areas indicate problems ahead for many of our resident and migratory bird species. Over the past 40 years, numerous species have responded to changing conditions on our planet by moving away from traditional locations – and sometimes cannot find suitable new habitat. Among Washington birds that have significantly shifted their ranges in recent decades are the Marbled Murrelet, Western Scrub-Jay, Lincoln's Sparrow, and Say's Phoebe.

Climate Change Risk	Effect on Habitat	Effect on Birds	Washington's IBA Birds At Risk
<p>SEA LEVEL RISE</p>  <p><i>Semipalmated Plover</i></p>	<p>Inundation, erosion, and degradation of natural shoreline</p>	<p>Loss of breeding habitat for beach nesting species; loss of feeding and stopover sites for Pacific Flyway migrants</p>	<p>HIGH RISK: Western Snowy Plover, Rock Sandpiper, Short-billed Dowitcher</p> <p>MODERATE RISK: Semipalmated Plover, Wandering Tattler, Black Turnstone, Red Knot, Sanderling, Long-billed Dowitcher, Black Oystercatcher, Surfbird</p>
<p>WILDFIRE PATTERNS</p>  <p><i>Burrowing Owl</i></p>	<p>Increased weed invasion, loss of native plants, habitat conversion, erosion of soil and reduction of stream/river quality</p>  <p>Common Dandelion (<i>Taraxacum officinale</i>)</p>	<p>Significant decline in quality of shrub-steppe ecosystem leads to fragmentation of habitat and bird populations, and extirpation of area-specific species; reduction in quality of coniferous forest habitat leads to further decline of old-growth dependent species but allows influx of pioneering, insectivorous species</p>	<p>HIGH RISK: Spotted Owl, Flammulated Owl, Greater Sage Grouse, Ferruginous Hawk, Sharp-tailed Grouse, Sage Thrasher, Sage and Brewer's Sparrows</p> <p>MODERATE RISK: Swainson's Hawk, Prairie Falcon, Burrowing Owl, Short-eared Owl, Loggerhead Shrike, Grasshopper Sparrow, Northern Goshawk, Dusky Grouse, White-headed Woodpecker, Hermit Warbler</p>
<p>WARMING TEMPERATURE; WETTER WINTERS, DRIER SUMMERS</p>  <p><i>Long-billed Curlew</i></p>	<p>Increases temperatures at all elevations. Decreased snowpack means less water for wetlands, lakes, rivers. Increasingly severe storms</p>	<p>Birds pushed into higher or more northerly ranges to maintain optimum body temperatures. Increased mortality risk from exposure to extreme weather. Fewer wetlands especially in eastern Washington for breeding and fall migrating waterbirds</p>  <p><i>Red Knot</i></p>	<p>HIGH RISK: White-tailed Ptarmigan, Gray-crowned Rosy Finch, American Pipit, Northern Shrike; Western and Clark's Grebes, Black-necked Stilt, American Avocet, Black Tern, Long-billed Curlew</p> <p>MODERATE RISK: American Bittern, Canvasback, Ring-necked Duck, Lesser Scaup, Ruddy Duck, Virginia Rail, Sora, Sandhill Crane, Long-billed Dowitcher, Wilson's Snipe, Wilson's Phalarope, Forster's Tern, Willow Flycatcher</p>
 <p><i>Gray Jay</i></p>	<p>Changes in location and timing of flora and fauna life cycles</p>	<p>Disruption of food availability on migration routes and in breeding grounds</p>	<p>70% of Washington birds are migratory and therefore at risk</p>
<p>ATMOSPHERIC AND OCEAN CIRCULATION PATTERNS</p>  <p><i>Tufted Puffin</i></p>	<p>Increase in ratio of El Niño to La Niña cycles resulting in warmer, nutrient-poor coastal waters and stronger wave-caused shoreline erosion</p>	<p>Reduction in food availability for oceanic and coastal birds plus inability to find shelter, or suitable nesting or breeding places increases vulnerability to predators, injury, and disease</p>	<p>HIGH RISK: Marbled Murrelet, Common Murre, Pigeon Guillemot, Cassin's and Rhinoceros Auklets, Tufted Puffin</p> <p>MODERATE RISK: Red-throated Loon, Sooty Shearwater, Pacific Loon, Black-footed Albatross, Northern Fulmar, Pink-footed Shearwater, Buller's Shearwater, Sooty Shearwater, Fork-tailed Storm-Petrel, Ancient Murrelet</p>