

Northwest Science Notes

The purpose of "Notes" is to periodically publish short papers (typically less than five pages in length). There is no specific format or content required for articles published here, but all papers will be peer-reviewed and must be scientifically credible. Authors may contact the Editor about the suitability of manuscripts for this section.

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Successful Bald Eagle Nesting and Fledging on Lower Yakima River, Washington

Bald eagles (*Haliaeetus leucocephalus*) are listed by the State of Washington and the Federal government as a threatened species. Population declines due to pesticide use, especially DDT (dichlorodiphenyltrichloroethane), habitat destruction, and indiscriminate killing prompted authorities to protect bald eagles under the Federal Endangered Species Act (ESA) in 1978 (U.S. Fish and Wildlife Service 1986). Populations in Oregon, Washington, Minnesota, Wisconsin, and Michigan were listed as threatened, whereas populations in the other 43 conterminous states were listed as endangered (U.S. Fish and Wildlife Service 1986). In the 1980s and 1990s, populations rebounded in response to elimination of DDT use, increases in habitat improvements and protection under the ESA, the Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act. As a result, the species was reclassified from endangered to threatened throughout the lower 48 states in 1995 (U.S. Fish and Wildlife Service 1995).

On 13 June 2000, during an aerial survey for mergansers (*Mergus* sp.), we observed two adult bald eagles on the Yakima River southeast of Granger, Washington. We located a nest during a ground visit on 15 June 2000, on property under restoration by the Yakama Nation (T9N R21E); two adult eagles were calling and flying around the nest. Simultaneous calling was coming from

the nest while the two adults were visible. We assumed the vocalization from the nest was coming from a nestling. We visually confirmed that one eaglet was in the nest 27 June 2000. On 31 July 2000, we confirmed the eaglet had successfully fledged. It was perched in a snag approximately 100 m from the nest.

The nest, in the shape of an inverted cone, was constructed in a fork of the main trunk of a black cottonwood (*Populus trichocarpa*). Surrounding habitat included a diversely aged black cottonwood overstory and a dense understory of willow (*Salix* spp), Wood's rose (*Rosa woodsii*), smooth sumac (*Rhus glabra*), golden currant (*Ribes aureum*), and other shrubs. Directly adjacent to the nest tree, on the upland side, was an irrigated winter wheat field. The Yakima River near the nest was multi-channeled. Riverbed materials were composed of gravel bars; several pools were present.

Successful bald eagle nesting activity has not been documented in the Lower Yakima Valley (LYV) for approximately 100 yr. Dawson (1902) reported the species nesting along the river near Snipe's Mountain, roughly one kilometer from the current nest. We spoke with biologists whose collective experience spans the last 50 yr in the region (Wendel Oliver, Washington Department of Fish and Wildlife, Retired, Yakima, and Ellis Bowhay, Washington Department of Fish and Wildlife, Retired, Yakima, Personal communication). No one recalled nesting bald eagles in the area.

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Kennedy (1914) assessed changes in the LYV avifauna in response to irrigation development and listed species he observed nesting in shrubs and trees. Bald eagles were not among the 40 species listed. If present he would have likely mentioned them considering how conspicuousness they are. Stepniewski (1999) reported nesting attempts in 1997 and 1998 along Toppenish Creek approximately 20 km from the nest we documented. No documented nesting attempt was observed/recorded in 1999. Stepniewski (1999) also reported that the only known pair of nesting bald eagles in all of Yakima County was in a tree along the shoreline of Rimrock Lake. That territory was occupied in 2000, but the pair did not produce young (Jeff Bernotowitz, Washington Department of Fish and Wildlife, Yakima. Personal communication).

Literature Cited

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We believe the return of nesting bald eagles reflects improved nesting and foraging opportunities. Large cottonwoods, abundant in the LYV on the Yakama Reservation, provide ample nesting substrates. American coot (*Fulica americana*) and carp (*Carpio* sp.) were the preferred forage species along the middle Columbia River (Stalmaster 1993). American coots and carp are plentiful in the LYV, and nesting bald eagles are likely exploiting these food resources.

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