

## **MIGRATION COUNTS INDICATE BROAD-WINGED HAWKS ARE INCREASING IN THE WEST: EVIDENCE OF BREEDING RANGE EXPANSION?**

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### **Abstract**

Extensive raptor migration monitoring began at sites west of the Rocky Mountains in the late 1970s. Records accumulated since then at a network of long-term sites operated by various organizations and individuals suggest that the number of migrating Broad-winged Hawks (*Buteo platypterus*) is increasing in western North America. HawkWatch International (HWI) currently monitors raptor migrations at 12 sites in seven western states, 10 of which provide data on Broad-winged Hawks. Regression analyses of passage rates indicate annual increases of 3–16% in the Goshute Mts., Nevada (autumn 1983–1999, average 36 birds/yr, range 6–160); Manzano Mts., New Mexico (autumn 1985–1999, 6, 1–14); Sandia Mts., New Mexico (spring 1985–2000, 6, 0–20); Bridger Mts., Montana (autumn 1991–1999, 8, 2–20); and at Lipan Pt., Arizona (1991–1999, 8, 0–35). In the Wellsville Mts., Utah (autumn) only two birds were seen from 1977–1979, whereas counts averaged >5 birds/yr from 1987–1999 (range 1–13). At Bonney Butte, Oregon, only five birds were seen during fall migration from 1994–1998. The 1999 count then increased dramatically to 75 birds, including a kettle of 59. Fourteen birds seen at Chelan Ridge, WA since 1997 (average five per season, range 2–7 birds) are the first of this species ever documented in Okanogan County. Several other non-HWI migration monitoring projects, as well as general sighting records from several western states accumulated in *American Birds* since the 1960s provide further evidence of significant migratory movements in the region, increasing abundance, and patterns of increasing aggregation during migration. Newly documented breeding activity in central British Columbia and other anecdotal evidence suggests that these apparent increases correlate with an expansion of the species' breeding range west of the Rocky Mountains in Canada.