

# Wintering Raptor Populations in Boulder County 1990-2011

Since 1983 Boulder County Nature Association (BCNA) volunteers have counted wintering raptors along survey routes scattered throughout the plains of Boulder County. We initiated the surveys during a time when intensified poisoning efforts by private landowners and government agencies appeared to threaten prairie dog populations in parts of Boulder County. Some of these poisonings were occurring in the Boulder Reservoir area, where Ferruginous Hawks, Red-Tailed Hawks, and Bald Eagles gathered each winter. We wanted to observe the effects of fluctuating prairie dog populations on these and other species. We also hoped to locate wintering raptor concentration areas, such as Bald Eagle roosts, Northern Harrier roosts and large prairie dog colonies, so that these areas could be protected.

Throughout the years of our survey effort, we have shared our data with the City of Boulder Open Space and Mountain Parks Department, the City of Boulder Parks and Recreation Department, and the Boulder County Parks and Open Space Department. BCNA has worked closely with these agencies to protect wintering raptor habitat. A Bald Eagle winter roost along Left Hand Creek, near Haystack Mountain, has been designated as "critical wildlife habitat" on the County Comprehensive Plan. The City has created wetlands on the west side of Boulder Reservoir to provide nesting and foraging habitat for Northern Harriers and Short-Eared Owls. BCNA has helped the City of Boulder Open Space Department draft a prairie dog management plan that recognizes the importance of prairie dog-raptor associations and commits the City to monitoring prairie dog and raptor populations.

Despite these efforts, some wintering raptor populations in Boulder County appear to be declining. This decline is most apparent in southeastern Boulder County where a proliferation of subdivisions and golf courses has replaced native grasslands. In the triangle of land bounded by the Boulder-Denver Turnpike (U.S. 36) to the north, the Foothills Highway (S.H. 93) to the west, and the Jefferson County Line to the south, numbers of Ferruginous Hawks and Bald Eagles seen on winter raptor surveys declined by more than 85% from 1993-96 as one prairie dog colony after another succumbed to development. Ferruginous Hawks and Rough-legged Hawks have declined all over the county. However, the generalists -- Red-tailed Hawks and American Kestrels -- have increased over the period since 1990. As a result, the sum of all raptors observed has fluctuated substantially, but does not show an obvious declining trend, as shown in the graph below.

Only three routes, Rabbit Mountain, Boulder Reservoir, and South County, have data that covers the entire range of years shown in the graph below.

### Boulder County Total of all Wintering Raptors

