

TECHNICAL NOTES

U.S. DEPARTMENT OF AGRICULTURE

WYOMING

SOIL CONSERVATION SERVICE

Biology No. 209

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Subject: GREAT HORNED OWL*

General

The great horned owl (*Bubo virginianus*) is a year-round resident of this region and occupies habitats ranging from cottonwood-bordered streams to evergreen treelands up to 10,000 ft (3,000 m) in elevation.

Food

The great horned owl is an opportunistic predator and feeds on a wide range of vertebrate prey. Mammals account for the greatest percentage of the total prey items and total prey biomass. A greater percentage of mammals is utilized in heavily forested mountainous areas than in lower elevations with semicultivated-woodlot habitat where predation on birds increases. The diet varies from year to year and seasonally, reflecting prey densities. Rodents and small mammals comprise a greater proportion of the diet during the warmer months. Great horned owls hunt more in open habitats than forested areas.



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*Information taken from Ecoregion M3113 Handbook and Habitat Suitability Index Models, Wildlife Species Narratives (literature searches), U.S. Fish and Wildlife Service, various dates between 1978-1984.

Water Requirements

No information regarding water requirements was found in the literature.

Cover Requirements

Great horned owls prefer large acreage tracts of dense timber with adequate perches. Dense cover protects the owls from harassment by crows, robins, and jays. Conifers are especially important during fall and winter when deciduous trees are bare and dense cover is scarce. Woodlots larger than 10 acres (4 ha) provided suitable roosting or wintering sites in Michigan.

Reproductive Requirements

Great horned owls are highly versatile in their nesting habits and utilize a wide variety of habitats. In this region, they usually nest in cottonwoods, junipers, pines, or holes in precipitous cliffs, often utilizing old nests of other birds.

Great horned owls remain in the general vicinity of the nesting area throughout most of the year and may select nest sites several months before eggs are laid. They often occupy the same nest site during successive years.

Nest sites in New York were near the center of woodlots at least 20 acres (8 ha) in size. Crown closure of trees around nest sites was nearly complete. Wooded areas in association with nearby creeks and rivers were heavily used in north-central Washington.

Height of nests varies considerably. Nests in Colorado are usually 8 to 30 ft (2.4 to 9.0 m) above ground. Factors believed to limit the breeding density of great horned owls include the availability of nesting sites, territorial requirements, habitat quality, and human disturbance.

Special Habitat Requirements

No special habitat requirements were found in the literature.

Interspersion Requirements

Large tracts of woodland are preferred for nesting and roosting, and open habitats interspersed with woodland are preferred for hunting. Great horned owls defend two types of home ranges: winter and nesting season. The maximum distance between major roosts in winter was 0.25 mi (0.4 km). Winter hunting ranges are 0.5 to 1 mi (0.8 to 1.6 km) from the roost. The average size of the nesting season range is 0.62 to 1.1 mi² (1.6 to 2.9 km²) in both Colorado and Wyoming. Nesting territories are actively defended within the larger nesting season range. In three instances in north-central Colorado, great horned owls nested within 400 to 800 m (440 yd to 880 yd) of each other.

Special Considerations

Great horned owls are quite adaptable and live in a variety of habitats. Nearly half of the destruction of raptor nests may be directly or indirectly attributable to man.