

One additional offspring in the population would increase the genetic potential of the adult Goshawks.

Prey were abundant in the 1979 nesting season. Food items included the Uinta ground squirrel (*Spermophilus armatus*), Steller's Jay (*Cyanocitta stelleri*), and Common Flicker (*Colaptes auratus*). Small mammal density was estimated by the recapture method (Smith et al. 1972, Scott et al. 1978), and was 165 animals per hectare in the meadows surrounding the nest woodlot. If food had been in short supply, there would have been no fitness gained by raising four undernourished young that would never survive to reproduce. At the other extreme, there would have been considerable waste of parental investment by having neglected a chick that could have been adequately fed.

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Figure 1. One-month-old Goshawk chicks. The adult female is in the background.

FEEDING ECOLOGY OF THE SPOTTED OWL IN CALIFORNIA

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Abstract

The Spotted Owl (*Strix occidentalis*) from the Coast Range of northern California and the Peninsular Range of southern California preys heavily on forest-dwelling mammals, especially the dusky-footed woodrat (*Neotoma fuscipes*). Meadows are not regularly hunted by these owls, despite large numbers of prey there. Indexes of prey biomass diversity indicate a relatively narrow prey base for the Spotted Owl in California. The Screech Owl (*Otus asio*) is an uncommon but regular prey item of the Spotted Owl; mobbing by Screech Owls in response to imitated Spotted Owl calls is described.

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