California Wildlife Habitat Relationships System

California Department of Fish and Wildlife

EUROPEAN RABBIT *Oryctolagus cuniculus* Class: MAMMALIA
Family: LEPORIDAE Order: LAGOMORPHA
M187

Written by: J. Harris, 1984
Reviewed by: S.L. Granholm, R. Duke
Edited by: H. Shellhammer

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The European rabbit was formerly known from the Farallon Islands, but has apparently been extirpated from California. This species has been introduced in many locations world-wide with disastrous consequences for wildlife, especially on islands. Formerly found in coastal scrub and dune habitat. Escapees are occasionally seen, but have not become established in the wild.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Eats a variety of grasses and forbs. May occasionally eat bark if other foods are unavailable.

Cover: Lives in a complex "warren" of burrows which may be 3 m (10 ft) deep with 45 m (144 ft) of tunnels. Warrens have many entrances.

Reproduction: A vegetation-lined nest is constructed away from active portions of the warren.

Water: No data.

Pattern: Prefers sandy, hilly terrain with shrubs and woody plants.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong; mainly nocturnal, but may bask in the early morning.

Seasonal Movements/Migration: None.

Home Range: The home range is rarely greater than 20 ha (50 ac). Densities range from 25-100 per ha (10-40 per ac).

Territory: These gregarious rabbits inhabit large colonies. The warren of a colony may cover 1 ha (2.5 ac). Males fight over females, and there is a dominance hierarchy.

Reproduction: The breeding season lasts from January or February to June or July. Gestation lasts 28 to 33 days. Litter sizes are generally 5 to 6, but range from 1 to 9. There may be 5 to 7 litters per year. In northern regions, a female generally raises 10 to 12 young per year. The altricial young are weaned in 4 weeks, and reach maturity as yearlings in wild populations. It is rare for a European rabbit to live more than 9 years.

Niche: With its tremendous potential for increase and its feeding and burrowing activities, the European rabbit is often a serious pest. These rabbits may bring about fundamental plant changes in plant species diversity and percent cover. Rabbits compete with seabirds for burrow sites. European rabbits have adversely affected seabirds, wildlife and agriculture (Gilham 1963, Fenner and Ratcliffe 1965, Pinney 1965, Normal 1970, Rogers and Myers 1979, Nowak and Paradiso 1983).

REFERENCES

Daly, J.C. 1981. Effect of social organization and environmental diversity on determining the genetic structure of a population of the wild rabbit, *Oryctolagus cuniculus*. *Evolution* 35:689-707.

Fenner, F., and F.N. Ratcliffe. 1965. *Myxomatosis*. Cambridge Univ. Press, New York.

Gilham, M.E. 1963. Some interactions of plants, rabbits, and seabirds on South African islands. *J. Ecol*. 51:275-294.

Norman, R.I. 1970. *Ecological effects of rabbit reduction on Rabbit Island*, Wilson's Promontory, Victoria. Proc. Royal Soc. Victoria. 83:235-252.

Nowak, R.M., and J.L. Paradiso. 1983. *Walker's mammals of the world*. Johns Hopkins Univ. Press, Baltimore, MD. 1,362 pp.

Pinney, T.C. 1965. *The biology of the rabbit (Oryctolagus cuniculus) on the Farallon Islands*. Ph.D. Thesis, Stanford Univ. Press, Stanford, Calif. 117 pp.

Rogers, P.M., and K. Myers. 1979. Ecology of the European wild rabbit, Oryctolagus cuniculus (L.), in Mediterranean habitats. *J. Appl. Ecol.* 16:691-705.

Watson, J.S. 1961. Feral rabbit populations of Pacific islands. *Pac. Sci*. 15:591-593.

Life history accounts for species in the California Wildlife Habitat Relationships (CWHR) System were originally published in: Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.