

USACE Natural Resource Management

Non-Migratory Birds



Burrowing Owl

FAST FACTS

REASONS FOR CURRENT STATUS: The Burrowing Owl includes many subspecies and has a wide range throughout the western U.S. and Mexico to the tip of South America. Despite its large distribution, population declines have been noted in Arizona, California, Colorado, Kansas, Nebraska, Nevada, Utah, and Washington states.

The North American Breeding Bird Survey estimates that populations have declined by 33% between 1966 and 2015. Nature Serve lists the subspecies as apparently secure, with the states of Oregon, Nevada, New Mexico, and Arizona noted as Vulnerable.

MANAGEMENT AND PROTECTION: Primary threats across the species' North American range include habitat loss and fragmentation due to intensive agricultural and urban land conversion. Available habitat is also degraded by impacts from the control and extermination of colonial burrowing mammals, viewed as pests.

Protecting burrowing mammal colonies (with an emphasis on large colonies and unfragmented habitat) is critical to sustaining viable populations. Burrowing Owls have benefited from protective legislation, reintroduction and habitat protection programs, and artificial nest burrows.

HABITAT NEEDS: Burrowing Owls are found in open grasslands, especially prairie, plains, and savanna.

- The species lives in underground burrows and has been noted to have a higher tolerance for carbon dioxide—similar to adaptations found in other burrowing mammals. (All About Birds)
- Optimum habitat is noted as having short vegetation and the presence of fresh small mammal burrows. Management for short grass by grazing and burning is beneficial, as long as adequate populations of burrowing mammals are maintained to provide fresh burrows. (Nature Serve)
- The species rarely excavates its own burrow, preferring to enlarge or modify existing burrows of other small mammals.
- Artificial nest burrows (ANBs) have been used successfully to augment nesting habitat where mammal burrows are limited.

Size: With long legs and short tails, Burrowing Owls are considered a small owl species.

Color: They have a bold white throat and eyebrows. The back is a mottled brown with a sandy-pale color belly.

Migration: While Burrowing owls are year-round residents in most of their range; they are migratory in the northern portion of their range with breeding populations in Canada and the northern most portions of the U.S. wintering in Mexico and possibly Central America.

*Photo Credit:
Tech. Sgt. Aaron Perkins, All
About Birds (Cornell Lab of
Ornithology)*

*Natural Resource
Management (NRM)*

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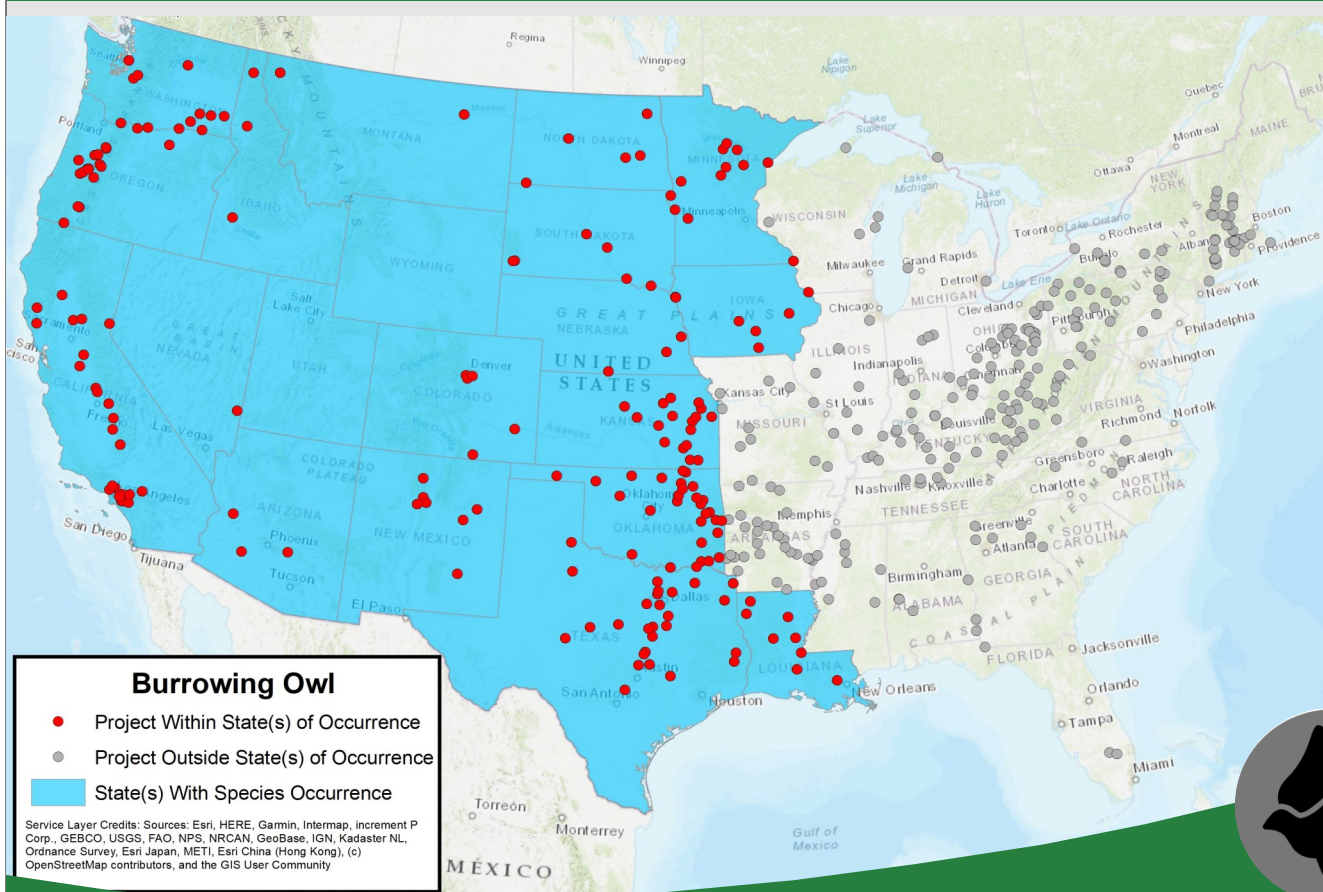
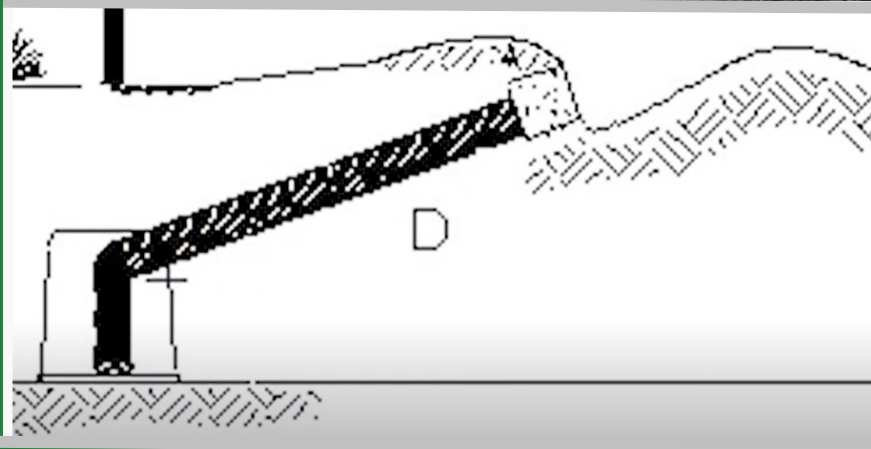


USACE ROLE: Increased habitat and nesting availability is an important conservation strategy for the Burrowing Owl. USACE operates many projects within the species' range. These projects play an important role in the provision of suitable habitat.

Photos: An artificial nest burrow (ANB) entrance as constructed by USACE staff at Ice Harbor Dam in Walla Walla District. Graphic: Staff built the ANB based on the design depicted.



USACE NRM Role: Burrowing owls are native to Washington State, but as noted, their habitat is under threat by fragmentation and urbanization. At Ice Harbor Dam, Walla Walla District, staff have constructed and installed an artificial burrow system for the owls. The burrows consist of 10-foot tunnels, made from PVC pipe about 6-8 inches in diameter. A burrow chamber is made from plastic fruit barrels that have been cut in half. A wire mesh floor is installed in the burrow chamber to allow for water drainage and predator reduction. To date, 16 burrows have been installed.



Source: Map provided by Ashleigh Boss, ORISE fellowship, Institute for Water Resources

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