



**STATUS: HIGH  
CONSERVATION  
PRIORITY IN IOWA**

## **Bewick's Wren** *Thryomanes bewickii*

### **Introduction**

A century ago, Bewick's Wren (pronounced like "Buick") was beloved as the "house wren" of the Appalachians Mountains and the Midwest. But today, the species is greatly reduced in number east of the Mississippi River and has declined in western parts of its range as well. Reasons for this widespread decline include competition with the European Starling, House Sparrow, and Song Sparrow; the use of pesticides on agricultural lands; and loss of habitat. But the decline appears most likely to be due to competition from the nest-destroying House Wren whose range expansion has accompanied the quiet exit of the Bewick's Wren.

Recognized by its white eye-line and longish tail with white corners (which it wags from side to side), Bewick's Wren is nearly as active and noisy as the House Wren, but unlike its close relative, it is considered to be rare in Iowa.



## Habitat Preferences

Bewick's Wren breeds in open woodlands, upland thickets, and hills in any suitable cavity or cavity-like structure, including rock crevices, outbuildings, abandoned automobiles, and centers of brush piles.

It prefers thickets, underbrush and certain heavily vegetated gardens. Breeding territories usually contain mixtures of thick scrubby vegetation and open woodland, and nests are well concealed. Iowa wrens may be located around out buildings of farms near brushy or wooded areas in cleared or fairly open country; but finding a Bewick's Wren, even in what appears to be suitable habitat, is by now means easy to do.

## Feeding Habits

These birds glean insect adults, the eggs and larvae of insects, and other small invertebrates from leaves, branches, and trunks of trees and shrubs; and they seldom feed more than 8 to 10 feet off the ground. They may forage on the ground rather frequently in areas of sparse vegetation.

Bewick's Wren gleans a wide variety of insects from leaves, branches, and trunks of lower strata of weeds, brush and trees; and also probes at crevices in branches and trunks, and flips and probes (but does not scratch) dead leaves and other detritus on the ground. In denser vegetation, this bird relies on hopping quickly among lower branches to capture food.

A very active forager on trunks, branches and twigs of trees, Bewick's Wren climbs and hops about pecking for food at a fast pace, and occasionally "hawks" insects. It seizes prey in its bill; and subdues prey by crushing it with mandibles, by shaking it, or by striking it against a branch. Prey is generally swallowed whole, but wings are often removed from butterflies and moths before they are consumed.

## Breeding Biology

Bewick's Wrens arrive in Iowa in April, and are probably monogamous. They defend a territory that averages one acre in size; and this defense is done entirely by the male through song. No information is available on courtship.

Nests are constructed in nearly any kind of cavity, including natural sites such as hollows in trees and old woodpecker holes; and in artificial sites such as nest boxes, holes in buildings, mailboxes, tin cans, and many other locations. The selected nest site is almost always less than 20 feet above ground. Males may build a number of incomplete "dummy" nests, and the female probably chooses one site and completes that nest for raising the young.

Typically 5 to 7 eggs are usually laid from a range of 4 to 11 eggs. Incubation is probably by the female only and lasts about 14 days. Both parents feed nestlings and young leave the nest about 2 weeks after hatching. Once fledged, both parents young for up to 2 additional weeks. Two or three broods may be reared in one nesting season.

## Concerns and Limiting Factors

Bewick's Wrens were probably never common in Iowa, but historical data indicates that they were once found in greater numbers here than they are today. There have been few records since 1960, and this species has definitely been on a downward trajectory. Observations in recent years may simply be the result of birders searching specifically for this species in the extreme southeastern corner of the state; the quadrant of the state that is thought to have always had the highest numbers of Bewick's Wrens.

The most likely cause of the population decline is the range expansion of egg-removing House Wrens, which is probably a result of two human-related factors: long-

term habitat changes such as succession in abandoned agricultural fields, and increases in the availability of human-placed nest boxes. Collisions with TV and radio towers have caused mortality within this species. Mortalities by other causes may include collisions with cell phone towers, glass windows, and attacks by feral house cats.

Few populations of Bewick's Wrens have been well studied and additional basic data on population dynamics is needed, especially in areas where Bewick's Wrens are more abundant than they are in Iowa. More research is needed on nest-site limitations, ecological factors affecting the dispersal of immature birds, and winter survival of juveniles and adults. Long-term studies of banded birds are needed to examine responses to drought cycles, as droughts may benefit Bewick's Wren in areas where it coexists with the House Wren.

Because the House Wren is strongly implicated in the severe decline of populations of Bewick's Wren, interactions between these two species should be investigated further. Factors that may limit nest destruction by House Wrens include differences in breeding phenology, nest-site and habitat selection, inter-specific territoriality, other aggressive interactions, and nest attentiveness. The ultimate consequences of widespread supplementation of nest boxes for House Wrens on the Bewick's Wren and other cavity-nesting species needs to be investigated on a landscape scale. Developed areas with abundant nest boxes may be the source of House Wrens that spread into the surrounding rural areas that were once populated with Bewick's Wrens.

### **Habitat Management Recommendations**

As a species of high conservation priority in Iowa's IBA Program, Bewick's Wren should

receive attention when conservation plans are written and implemented for the state's IBAs.

This species might benefit locally from removal of House Wrens, but it is not known if a removal program has ever been attempted. Although House Wrens are protected under the Migratory Bird Treaty Act, it might be possible to reduce populations by removal of supplemental nest boxes. Nest box supplementation for Bewick's Wrens may be effective only in areas where House Wrens are absent or rare.

Since reproductive rates are potentially high for Bewick's Wrens, it might be possible to expand their current numbers and perhaps their range, if the primary factors responsible for ongoing population declines can be identified and eliminated or reduced significantly.

At present, no large-scale habitat management program is known to be underway for this species, but providing the necessary mix of habitat in small units is something that county and state biologists and private landowners might wish to attempt.

Implementation of specific habitat management practices for this species is problematic because many areas that might be thought to be suitable habitat are also considered to be prime real estate for suburbs, farming, ranching, golf courses, etc. Perhaps the best that can be done is to protect the existing habitats that this species is known to utilize, and attempt to create or restore similar habitats within the surrounding landscape.

For general information about Woodland and Grassland Management for Birds, and Recommended Woodland Management and Grassland Management Practices, see those sections within Part 3.