

ARE KING RAILS HIDING IN YOUR MARSH?

IDENTIFICATION FACT SHEET

The **King Rail** (*Rallus elegans*) is listed as an **Endangered species** both federally and provincially. Only an estimated 25 to 50 pairs remain in Canada and southern Ontario being the northern extent of its breeding range. The decline of the King Rail population, both in Canada and in the United States, has been largely attributed to loss of its wetland habitat. Our key recovery goals are to determine current population status and distribution, and to protect and increase the King Rail population and its habitat.

In recent years, special surveys have documented King Rail occurrences in several Great Lakes coastal and inland marshes associated with Lakes Ontario, Erie, St. Clair and Huron. It is suspected that King Rails are also waiting to be discovered in other wetlands in southern Ontario. The King Rail is a difficult bird to detect due to its rarity and secretive nature. Use of tape-recorded broadcast calls is likely the most efficient survey method, but an awareness of the bird's physical appearance and its preferred habitat characteristics will also be helpful in locating King Rails. **This fact sheet provides information to help identify King Rails through visual and auditory cues and characteristics of King Rail habitat.**

VOCAL CHARACTERISTICS

Due to the elusive nature of the King Rail, it is more likely to be detected through its vocalizations, most often in **early morning** and **evening** during breeding. However, some calls of the King Rail maybe easily confused with those of the Virginia Rail. To hear some calls of these two birds, check out this webpage www.wildspace.ec.gc.ca. Here are the most common calls of King Rail, and their Virginia Rail analogues.

“gump.gump.gump” call

This deep grunting “gump.gump.gump” call, which starts off loudly and ends more softly in volume, maybe confused with the Virginia Rail’s high-pitched “waka.waka.waka” call. The King Rail’s “gump.gump.gump” call is much deeper and louder in tone (resonance), and it does not descend in tone pitch nor speed up. The Virginia Rail’s “waka.waka.waka” call speeds up (like a bouncing ping-pong ball) as it descends in tone and softens in volume. If the Virginia Rail is a “baritone”, then the King Rail is a “bass”.

“check.check.check.check” call

This call is a series of several harsh “checks”, all similar in tone and volume, and given in an even tempo. This call is not similar in anyway to any Virginia Rail’s calls.

“kik.kik.kirrrr” call

This call is a loud, rapid, high-pitched series of two to three syllables, quite harsh and “urgent-sounding” in nature, with emphasis on the “kirrrr” syllable. It is similar to the Virginia Rail’s “kicker” call, but the Virginia Rail’s call has a few more “kiks” and sounds more musical.



King Rail



Virginia Rail

Key Physical Characteristics

General

The King Rail weighs up to 450 grams (1 pound) and reaches up to 49 cm (19 inches) in length. It is similar in size to a **crow**.

It has a narrow body from the front, long brown-grey legs and toes and a long, slightly down-curved, yellowish bill. Sexes are difficult to distinguish.

When alarmed, they may fly short distances, low above the vegetation and water. Usually they do not flush but tend to run through the marsh instead.

Plumage

- cinnamon breast, back, rump, wings, cheeks, and lower throat;
- dark streaking on back;
- distinctive black and white barring on the flanks;
- chestnut forehead, crown and nape; and
- white chin and upper throat.

Similar Species

The King Rail is most likely confused with the **Virginia Rail**, although the **King Rail is twice its size**. Apart from size differences, the King Rail has a yellowish bill, compared to the Virginia Rail’s reddish-orange bill. Although the King Rail may have some gray in the face, the Virginia Rail has a distinctive gray cheek patch. Though also secretive, Virginia Rails are much more common in southern Ontario marshes than King Rails.

HABITAT

In Ontario, the King Rail has been associated primarily with emergent coastal marsh, often dominated by **cattails** (*Typha* spp.), **sedges** (Cyperaceae), and **common reed** (*Phragmites australis*). **Scattered shrubs** are also frequently nearby. The extent to which King Rails occupy inland wetlands is uncertain but there are several historic and recent records, suggesting that survey efforts should not ignore these areas. Minimum wetland area requirements are unknown. These birds have been primarily found in marshes greater than 70 hectares (173 acres). Still, **marshes as small as 3 hectares** (7.5 acres) may also provide suitable habitat. King Rails have also been found in restored wetlands and impoundments. King Rails seem to favour wetlands that offer a **range of water depths** (from less than 25 cm to up to a metre), which in turn provide areas of **dense cover**, **hummocky topography** (or clumps of vegetation rising up from the wetland), and **some exposed mud**. An **interspersed wet and dry areas** appears to be a key element.

Adults feed on a variety of aquatic organisms, usually while well concealed by a plant cover of marsh vegetation, but occasionally in open shallow water (i.e., moist to 8 cm deep) or on mud flats. They feed particularly at dawn or dusk.

NESTS

Nests contain 10 to 12 eggs and are built over shallow water, on or near grass or sedge tussocks, or at the base of a shrub. Occasionally, nests are found in upland fields adjacent to wetlands. Nests are well concealed and are composed of a base of decaying vegetation, a circular platform of dry grasses, sedges or rushes, a canopy of bent stalks, and an entrance ramp. Several “brooding nests” without canopies may be found near the nest that is used for egg laying and incubation.

BREEDING CHRONOLOGY

King Rails are migratory birds. They arrive on their breeding grounds in Ontario from mid April to early May. Nest building is initiated during mid May to June. They migrate south in the fall.

CONTACT INFORMATION

If you find a King Rail or potential King Rail habitat, please carefully record the location, a detailed description of the habitat, time and date, or to request more information, contact: **Environment Canada 1-866-833-8888** or **Ducks Unlimited Canada 1-866-389-0418**. This information will then be passed on to members of the national King Rail Recovery Team for follow up.



Top image: Emergent vegetation such as cattails and sedges as well as shallow open water are key components of King Rail breeding habitat.



Bottom image: King Rails are frequently found in association with hummocky topography and dense emergent vegetation.



King Rail © George P. Peck



King Rail Habitat © Ducks Unlimited Canada



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