## ABOUT THE COVER

## Virginia Rail

A cryptic bird of vegetation-choked marshes, the Virginia Rail (Rallus limicola) is more often heard than seen. Its species name means "mud-dweller," and several of its folk names, e.g., "freshwater marsh hen" and "small mud hen" give further indications of its marsh-dwelling nature. Because of its cryptic behavior it is understudied, and information is lacking on much of its natural history.

A small, plump, reddish bird with rufous wings and gray cheeks, black-and-white striped flanks, and short, upturned tail, the Virginia Rail is readily separated from the Sora Rail with whom it shares marshes by the Virginia's long, slightly down-turned bill. Virginia Rails superficially resemble King and Clapper rails, but are readily identified by their much smaller size. Juvenile birds lack the gray cheeks and much of the ruddy coloration, and have spotted gray breasts. Virginia Rails are superbly adapted for life in thick vegetation. They have laterally compressed bodies, strong muscular legs, and even possess a claw on their wings that can aid in climbing through vegetation. They rarely fly except during their nocturnal migrations. They can swim and dive, propelling themselves underwater with their wings. Taxonomically, they are monotypic, with very little geographic variation.

Virginia Rails breed in local suitable habitat across much of southern Canada to Nova Scotia in the east, and roughly north of a diagonal line from Massachusetts to northern Baja California. They also breed along the East Coast south to North Carolina. They have a patchy distribution in Mexico and Central America. They are year-round residents along the entire Pacific Coast, and winter from the far Southwest through Mexico and along the Gulf and Atlantic coasts as far north as Massachusetts.

Migratory Virginia Rails arrive in Massachusetts in April, and depart in September and October. By then they have molted their flight feathers, and have survived a flightless period while they replaced their feathers. Small numbers winter on Cape Cod and the Islands, and appear from time to time on Christmas counts.

Virginia Rails are monogamous and produce one or two broods. For nesting they prefer freshwater marshes with heavy emergent vegetation, such as cattails, interspersed with areas of open water and mud. In winter they inhabit both fresh and saltwater marshes. Both males and females are highly territorial, and will respond to tape-recording of their calls, sometimes coming up and pecking at a tape recorder placed on the ground. Males have a *tick-it* advertising call in spring, a *kiu* alarm call, and a *kicker* call that may be a female call, advertising for males. Pairs often communicate with duetting *grunts*. Chicks utter strong calls when separated from parent birds. In courtship males circle females with wings raised, with tail-flicking and bowing. Courtship feeding and mutual preening are common. In territorial disputes, Virginia Rails will leap into the air and rake opponents with their claws. They may also attack from behind, and bill-stabbing is common.

The nest site is probably selected by the female, and is in thick emergent vegetation, at or near the water surface. Both parents build the nest that is a loosely woven basket of adjacent vegetation, often with a canopy of bent-down reeds. A ramp to the water is a common nest feature that aids the chicks in going back and forth to the nest. Several dummy nests are usually constructed and used for resting or brooding after the young have left the original nest. The clutch is 7-12 cream or buff eggs, spotted brown or gray. Both parents incubate although the female does the majority of the work during the about three-week incubation period. The young are precocial and may use their wing claws to pull themselves through the vegetation. They can swim and use the ramp by age one day, remain at the nest for 3-4 days, and are fed by the adults for the first few days. Adults fiercely defend their young, attacking intruders with rasping grunts, head and neck low and forward. They will give wing-drooping distraction displays as well. The brood remains in the territory for 3-4 weeks, and the young can fly in about a month.

Virginia Rails forage both tactilely and visually, probing mud flats or gleaning insects from vegetation. Their long toes allow them to forage on floating vegetation in deeper water. They feed on a variety of animal prey including beetles, snails, insect larvae, crayfish, earthworms, and even small snakes or frogs. Unlike most birds, they have a good sense of smell which doubtless aids in locating prey.

Virginia Rail populations declined during the twentieth century, largely as the result of wetlands destruction, but most populations are now considered stable. The Virginia Rail is still considered a game species in most states, although hunting pressures are considered low. They are, however, still hunted on coastal wintering grounds with bag limits of twenty-five birds in many states! They are subject to predation by muskrats, snakes, weasels, raccoons, raptors, blackbirds, wrens, and herons. They lose chicks to predatory fish and the voracious snapping turtle; they experience high chick mortality. Nonetheless, they continue to persist in remaining wetlands.

William E. Davis, Jr.

## About the Cover Artist

David Sibley has written and illustrated articles on bird identification for *Birding* and *North American Birds* as well as regional publications and books including *Hawks in Flight* and *The Birds of Cape May*. Since 1980 David has traveled the continent watching birds on his own and as a tour leader for WINGS, Inc. He has spent most of the last six years at a drawing table writing and illustrating the new *Sibley Guide to Birds*, a comprehensive guide to North American birds. This book was published in October 2000 and is now in the fourth printing. He has spent alot of time since October attending book signings. You can see-more of David's artwork at his website <www.sibleyart.com>. He lives in Concord, Massachusetts, with his wife and two sons.