

# South Carolina WILDLIFE

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## The Bald Eagle

BATLES

**P**ERCHED in regal immobility atop a solitary tree or swinging in great circles at lofty heights, the bald eagle is the perfect symbol of strength, courage and freedom.

Though severely reduced over much of its former range by the relentless pressures of civilization, it can still be seen throughout South Carolina. Predominantly a coastal resident, the bald eagle breeds most commonly on the barrier and sea islands and adjacent mainland of the low country, but is also found in the vicinity of swamps and inland waters.

The bald eagle was first made known to science from South Carolina. A specimen was secured here in the 1720's by the English ornithologist Mark Catesby and named—by Linnaeus—*Haliaetus leucocephalus*, the Greek for white-headed sea eagle.

The southern bald eagle ranges in length from 30 to 37 inches and in weight from seven to twelve pounds. With

a wingspread of up to seven and one-half feet in the slightly larger female, the eagle can attain considerable speed in spite of its size.

Its diet is diversified, though fish predominates, and the eagle sometimes relieves the osprey of its catch. It occasionally takes small mammals, coots and crippled ducks but rarely molests other game birds. Carrion is a rather important part of its subsistence and any vultures in the vicinity stand aside until the eagle is finished.

The status of the bald eagle in South Carolina, and throughout the country, is alarming. It will require intense effort to prevent any further decline in the much-reduced population of this magnificent bird. Without such an effort we will lose one of nature's most inspiring sights—the bald eagle soaring with great flat wings, its head and tail flashing as they catch the sun.

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to the Value of Our Natural Resources

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Front Cover—Blue jay by Anne Worsham Richardson.  
Inside Front—Carolina Sketchbook. Drawing by Prescott Baines.  
Inside Back—Enthusiastic retriever in action. Photo by Billy Durant.  
Back Cover—The duck hunter's dream. Photo by Billy Durant.

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"Pintails"



# South Carolina's Waterfowl

by Rembert Dennis, Jr.



WINTERING WATERFOWL find South Carolina a generous host. The great expanse of rivers, lakes, marshes, bays and ricefields in our state is the wintering ground for visiting ducks. In addition, our state is fortunate to have many fine lake systems with acres of desirable habitat to offer the flights of waterfowl traveling the Atlantic flyway.

One of the best-known of these winter visitors is the mallard or "green-head" as he is commonly called. Found along rivers, ponds, ricefields, flooded woods and grassy areas, the mallard decoys readily and responds to calling. Being a puddle duck, that is one that feeds by tipping his head beneath the surface, he is capable of jumping from the water to instant flight and often climbs straight up for several feet at incredible speed for so large a bird. His normal diet is 90 per cent vegetable and 10 per cent insect, with preference for a variety of fresh-water plants, grasses, pondweed, smartweed, acorns, tree seeds and nuts. He destroys insects, especially mosquitoes, and occasionally will eat snails and minnows, but only when he cannot find desirable vegetation.

The black duck or "black mallard" is one of the most important puddle ducks. He is most wary, with excellent vision and acute hearing. He's fast in flight and can jump from the water faster than a mallard. The black's habits are similar to the mallard's, but restricted wintering and nesting areas subject populations to more fluctuation than mallards.

Third after mallard and black in abundance of population, width of range and table quality is the American Pintail. The abundance of this duck is due largely to his natural wariness. The sleek body lines give the pintail an illusion of faster flight, and his longer-reaching neck enables him to tip in deeper water than other puddle ducks.

The wood duck or "summer duck" is one of the most beautiful waterfowl, as the origin of his name indi-

"Autumn Leaves"



"Stormy Morning Widgeon"



cates. It is *aix* from Greek and *spousa* from Latin which roughly translated is "waterfowl in wedding dress." His diet consists of approximately 90 per cent acorns, nuts and other vegetation, but populations are down due to his natural swamp habitat being destroyed for timber. Known for his swift, steady flight, the wood duck decoys easily but is very alert on the water.

The gadwall is a large duck and is less wary than the mallard or pintail. However, he can get away quickly, winging off faster than a mallard. The gadwall is a surface-feeding duck and can be found along rivers and ponds where he scoops vegetation off the surface or feeds by tipping. One unusual aspect of this vegetarian is that when necessary he can dive for food.

The baldpate or American widgeon is shy, nervous and wary of decoys, and when alarmed can jump straight from the water and bend and weave

in a tight group flight. His diet is about 93 percent vegetable and he often feeds with diving ducks, especially canvasbacks and redheads, and has the habit of snatching away plant stems which they bring up to the surface of the water. Normally a day feeder, under hunting pressure the widgeon often feeds at night, as does the black, especially when there is a full moon.

Known by many hunters as the "king of ducks", the canvasback is wary but curious and a proven table delicacy. Found along the coast, this expert diving duck is known to dive ten to twenty feet to find succulent grasses. However popular this duck may be, these birds are protected now because of decreasing numbers due to market hunters of the past who took a heavy toll, and drainage of breeding grounds and drought have contributed greatly to their decline.

The redhead, like the canvasback

with which it is allied, is curious, trusting and decoys readily, but this species is also protected, and there is no open season on either redheads or canvasbacks this year.

The erratic, unpredictable flight of the beautiful green-winged teal presents a challenge to waterfowl sportsmen. He is the smallest of North American waterfowl, but what is there is all succulent flesh because of his vegetable diet.

It is the blue-winged teal that starts the fall migration, and since research shows this species can sustain more hunting pressure than it has in the past with no adverse effect on populations, there is a bonus the last 9 days of South Carolina's season.

A very popular visitor to our state is the ring-necked duck. He is a fast erratic flier that decoys readily in areas where he can find his favorite foods, which are water lilies, pond-weeds, grasses and smartweeds.





**"Eastwind Canadians"**



The scaup is similar to the ring-neck, and in South Carolina we probably have only lesser scaup rather than greater scaup, but it is almost impossible to tell the difference except by habits. Commonly called "bluebill" or "broadbill," they dive expertly into deep water to tear up aquatic plants by the roots. They prefer pondweeds and wild rice.

The shoveller or "spoonbill" is not very plentiful in South Carolina, and he does not rate very high on the hunter's list of waterfowl for the table because of his high animal diet. He resembles the mallard and blue-winged teal and is known for his vertical ascents and descents. However, when startled, he has a very awkward flight.

The mergansers or "fish ducks", of which we have the hooded and red-breasted, are also low on the desirable food list. Their flesh is stringy, tough and strong tasting, and generally these ducks are bagged accidentally. They are easily identified by their narrow "toothy" bill which works perfectly to catch fish as they do by diving and chasing the small ones underwater.

For the first time South Carolina has a split waterfowl season. It will be November 22-December 2 and December 13-January 20. The daily bag limit is five; however, the daily kill shall not include more than two wood ducks, one black duck, or four mallards.

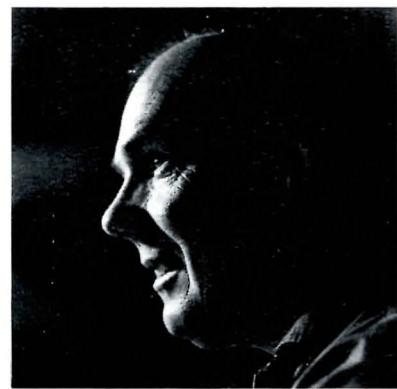
The daily limit on mergansers is five; but only one hooded merganser may be killed per day.

In addition to the daily bag limit of five ducks, a bonus of two blue-winged teal may be killed during the period January 12-January 20.

There is also a bonus of two scaup east of U. S. Highway 17, north of Charleston and east of the Seaboard Railroad bed from Charleston south.

The daily bag limit on Canada geese is one and on coots is fifteen.

There is no open season on canvasbacks, redheads, blue and snow geese, swans or brant.



Larry Toschik, whose waterfowl paintings appear on these pages, enjoys international recognition as an outstanding wildlife artist.

Born in 1922 in Milwaukee, Wisconsin, Toschik showed interest and talent in art at an early age. His school years were marked by many local and national art awards, culminating in a scholarship to the Wisconsin Art Academy.

He temporarily left high school to explore the West on foot, crossing the northern states to Great Falls, Montana. His experiences there—gathering logs, working with Blackfoot Indians on construction crews, doing ranch work and his general close association with the out-of-doors—laid a good foundation for later years when he illustrated numerous historical and wildlife novels and technical research papers on wildlife.

He took advantage of his service in Italy in World War II to study the great masterpieces of Renaissance Art. This influence is evident today in his attention to accuracy, lighting and composition and in the unique finish and application of his pigments.

Twenty-five productive years have proven Toschik not only a talented artist but also an appreciator of wildlife and conservation objectives. He is an honorary trustee of Ducks Unlimited, a member of the Wildlife Society, the Audubon Society and other wildlife organizations.

His success as a painter of wildlife caps his career in commercial art and editorial illustration. Entire issues of Arizona Highways magazine have been devoted to his work and for three years "Hallmark Cards" has published a calendar of his paintings. He was recently selected as the artist for the Ducks Unlimited commemorative medallion program, which features seventeen species of duck and three species of geese struck in pure silver.

Toschik is a resident of Phoenix, Arizona. He is represented by major galleries in Taos, New Mexico and Carmel, California and his work is included in many important private collections.



# Winter Trout

by David Cupka

**K**OWN TO ANGLERS by a dozen common names, the most sought after and most often caught species of sport-fish in the coastal waters of South Carolina is the spotted sea trout, also called winter trout or speckled trout. Its fine appearance (it looks like a fish *should* look), firm flesh and excellent flavor make this an esteemed fish among sport fishermen.

It is also sometimes referred to as "weakfish" by anglers. This term, however, is not indicative of its fighting ability, but rather refers to its fragile mouth structure which makes it easy to lose a hooked fish.

The spotted sea trout normally ranges from New York to Mexico, with the center of abundance for the species being Florida and the Gulf of



A nice string of trout, although there are none over 2½ pounds. These were caught on a receding tide, but most fishermen swear by a flood tide.

Mexico. But as many South Carolina anglers can tell you, we also have our share of these excellent game fish.

The world's record winter trout tipped the scales at 15 pounds, 3 ounces, but the average size fish runs from two to five pounds. The current South Carolina record is an 8-pound, 15-ounce specimen caught at Breach Inlet in Charleston County.

Winter trout begin to school at a size of one to two inches and continue to school until they are five or six years old. The female, which grows faster than the male, also has a longer life span. Most males die by the age of six years and the surviving females, now weighing six to eight pounds, become semi-solitary in habit. Females may live to be nine years old or more. These large fish are sometimes referred

to as "sow" or "gator" trout by fishermen.

Trout are euryhaline, which means they can tolerate a wide range of salinities, but they prefer medium and moderately low salinity environments such as our bays and estuaries. Both the young and adult stages of the sea trout appear to be equally tolerant to normal environmental fluctuations found in their particular region. However, if these fluctuations are abrupt and a rapid change in temperature or salinity occurs, the sea trout population will be affected and they will move to escape these conditions if possible.

Occasionally trout are trapped in shallow areas in the winter and an abrupt temperature change results in a fish kill.

When the water temperature drops in the fall, part of the trout population moves into the inlets and beach areas where they become accessible to the surf and pier fishermen. Mature fish are also taken by pier and surf anglers in the spring and early summer, but these movements may be related to their spawning activity.

Trout are also found to congregate around shell banks and docks in very shallow water at night during especially cold weather and under these conditions they are often taken by gigging. This behavioral aspect may be a protective one, allowing them to avoid natural predators.

There is some evidence of a four-year cycle of abundance of winter trout in South Carolina waters. If this trend continues to hold, trout



Fishing for bait shrimp with a cast net takes a little work, but it's a good way to get bait. Shrimp are the favorite although some trout are caught on artificials.

fishing during 1972 should be excellent.

The spotted sea trout feeds primarily and preferably on various species of shrimp, but it also utilizes other fish as a food source, such as various species of mud minnows and anchovies as well as mullet and silversides.

Winter trout are good fighters, but many people have a tendency to use heavier tackle than necessary when fishing for them. The real thrill and challenge comes in landing a six or seven pounder on ultra-light tackle.

The prime fishing months are September through December and May through June, when large numbers of fish are taken by small boat, pier and surf fishermen. Anglers utilizing a small boat usually drift or anchor over deep holes or cast along shell banks or near pilings. The mouths of "feeder" creeks are also good spots at high ebb tide as trout often congregate in these areas to feed on shrimp and bait fish moving out of these creeks with the tide. Slow trolling is another method sometimes used. The surf and pier fishermen find that the best area is usually just beyond the break-

ers. Some fishermen claim that the tidal stage makes a difference in trout fishing, while others say it is irrelevant. This depends in large part on the area being fished and the time of year and other factors affecting water conditions.

Some of the more popular areas in the state for trout fishing include Murrells Inlet, North Edisto River, Wando River and the numerous estuarine areas and tidal creeks which predominate in the southern part of the state.

Night fishing for winter trout has also become popular in several of the southern states. Many fishermen believe that the fish bite better at night than during the day.

Live shrimp are the most popular and widely used bait for catching trout, but they can also be taken using dead shrimp or mud minnows. Many fishermen prefer to use artificial lures, and two of the most popular are the bucktail and stingray grub. Trout can also be taken on plugs, spinners, spoons and streamer flies.

Just like largemouth bass plugging, it often becomes necessary to change lures. A successful lure one day may fail to produce a single strike the next. Whatever they are caught on, winter trout should be cleaned as soon as possible because their flesh deteriorates quickly after death.

During the last several years, a trend of decreasing catches of winter trout has been noticed in several southern states, including South Carolina. This is probably due in part to increased pollution and alteration of many of our estuarine and bay areas by means of bulkheading and dredge and fill operations. There is some evidence that most winter trout movements are short and that there is very little exchange of members between estuarine systems. This means that adverse conditions, whether natural or man-made, can result in long-lasting or permanent damage to an area in terms of its trout population, since immigration or recruitment from other areas is practically non-existent.

The winter trout gives one more reason we must offer maximum protection to our delicate estuarine areas.