

THE *Chowan River*



By

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DIVISION OF INLAND FISHERIES

NORTH CAROLINA WILDLIFE RESOURCES COMMISSION
Raleigh, North Carolina

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■ The Chowan River, an interstate stream, is formed by the confluence of the Blackwater and Nottoway Rivers at the North Carolina-Virginia state line. The river flows in a southeasterly direction for approximately sixty miles to Albemarle Sound. The river remains at sea level from its mouth upstream to the Meherrin River, a distance of approximately forty-eight miles. Due to a very gentle stream gradient, the river seldom floods, although wind tides may effect water level fluctuations of as much as one foot in a short period of time. This river is one of the more important natural resources of northeastern North Carolina. It supports a major commercial fishing industry for herring, catfish, white perch, and striped bass--as well as supporting excellent sport fishing. The river is a heavily used recreation area with swimming beaches and many homes and summer cottages along its shores.

The shores of the majestic Chowan are lined with many noble "ole" cypress trees the likeness of which would grace the canvas of the most fastidious artist. The swampy shoreline is laden with a variety of plants that will entrance the most ardent botanist. Along with the wide array of plant life along the Chowan, there is an abundance of animal life such as deer, squirrel, mink, otter, muskrat and an occasional black bear.

In recent years, the Chowan River has been playing an important role in our national defense. The swampy terrain of the upper portion of the river provides excellent training grounds for some of our specialized armed troops.

As is the case with many of our natural streams, the Chowan River receives pollution from a number of sources. The Department of Water and Air Resources lists nineteen significant sources of pollution in that portion of the Chowan River Basin located in North Carolina. Pollution also is added from the State of Virginia since much of the Chowan River drainage basin lies within that state. Continuous monitoring by the Department of Water and Air Resources has indicated no violation of minimum water quality standards necessary to support fish life. However, there are no standards for such parameters as color and nutrient enrichment.

The absence of a nutrient enrichment standard came to light with the outbreak of an intensive algal bloom which persisted throughout the lower Chowan River during the summer of 1972. Excessive nitrogen was labeled as the catalyst trigger-

ing the intensive algal bloom. At this point, it is not known what effect the algae has had on the excellent fishery that has persisted for years in the lower Chowan.

From July 1968 through June 1971, the N. C. Wildlife Resources Commission conducted an intensive netting and tagging study on Chowan River fishes. During the study, trap nets were maintained in the Chowan from the Virginia-North Carolina state line downstream to Holiday Island (see map). It was learned during the study that the Chowan River supports an excellent fish population. Typical fishes one might encounter upon a visit to the Chowan River are included in the following resume:

Black Crappie

The Chowan supports an excellent black crappie population that is sought avidly by Chowan River anglers. Excellent catches are made during spring and fall by anglers using minnows as bait. Best catches usually are made around "hurdles"--a fish attractor constructed from myrtle bushes and anchored in a secret spot. Other likely spots for crappie are around sunken tree tops and logs, in and around pound net stakes and at the mouths of tributary streams.

Largemouth Bass

Largemouth bass, many within the 10-pound class, are abundant in the Chowan River. Excellent catches of largemouth were made at all trap net locations during the Wildlife Resources Commission's study. One of the largest largemouth bass ever witnessed by this writer and a Tunis commercial fisherman was captured in a trap net near buoy #29 just downstream from Tunis. Estimated weight was in excess of 12 pounds. The fish was tagged and released near the buoy.

Good trap net catches were made at the following locations (see map of Chowan River): mouth of Mud Creek, mouth of Meherrin River, just downstream from Dowry Island, just upstream from the mouth of Somerton Creek, and at the mouth of Goose Creek. Excellent fishing for largemouth may be found in and around the Holiday Island vicinity and downstream from Cannon Ferry to the U. S. Highway 17 bridge near Edenton.

Monitoring of commercial pound nets in the Tunis vicinity revealed that this portion of the river supports an excellent largemouth bass population. Soon after the nets have been installed in the river, usually during mid-February, large catches of bass have been witnessed. Each lift of a pound net usually produced a catch of 10 to 20 largemouth within the 10-pound class. The bass promptly are returned to the water by the Tunis fishermen. Catches such as these continue for two or three weeks. After this period, only an occasional largemouth is taken in the pound nets as the bass apparently become wise to the nets.

Hook and line fishing for largemouth bass is especially good during late fall and early spring at almost any area throughout the entire length of the river. As one is fishing the Chowan River area, he should not be hesitant to try his luck in the feeder streams. A few of these streams are as follows: Meherrin River, Potecasi Creek (tributary to the Meherrin), Barnes Creek, Wiccacon River, Goose Creek, Bennets Creek, and Keels Creek. Each of these streams supports a good largemouth bass population.

The plastic worm probably will catch more bass in the Chowan than any other type of lure. However, the thrill of seeing a bass rise to take a top-water bait far outweighs the sheer number of fish taken on the highly effective worms--at least for this writer.

White Perch

The Chowan River supports an enviable white perch population. This fact is supported by the excellent sport and commercial catch statistics for the entire river.

White perch are among the top panfish to come from the Chowan almost year-round.



There apparently are two distinct white perch populations within the Chowan River-Albemarle Sound System. One population remains in the upper reaches of the river throughout the warmer months of the year and moves downstream with the coming of colder temperatures. The other population frequents that portion of river near the mouth and may be found concentrated in certain areas of Albemarle Sound. During mid-March and early April, this population migrates upstream apparently on its annual spawning run. It is during this spawning activity when excellent sport and commercial catches are made upstream in the Tunis vicinity. The white perch go on a feeding spree soon after spawning, feeding rampantly on freshly-spawned herring eggs.

Excellent sport fishing prevails during the period for those using small spinners or minnows as bait. Soon after the spawning frenzy, these perch return to the lower portion of the river and sound where excellent sport catches are made throughout the summer months, particularly alongside of the U. S. Highway 17 bridge near Edenton. Minnows seem to be the preferred bait during this period. As a general rule, the perch that migrate upstream are generally larger than those that remain in the upper portion of the river.

Bluegill

The Chowan River is an important bluegill stream. Most any sunken tree top or log is a likely spot to locate a fat and sassy bluegill. Excellent catches are taken with artificial flies and crickets. Most local fishermen prefer to use crickets as bait. When one is using a fly rod for bluegill on the Chowan, he should remember not to work his lure too rapidly. Even though the Chowan bluegill will readily take a popping bug, they seem to be somewhat cautious; therefore, you should hesitate for a second or two longer than normal before retrieving your bug for another cast.

Yellow Perch

The yellow perch is classified in the family Percidae which also includes the walleye, sauger and some small, bottom-dwelling fishes. Fishermen usually do not like the yellow

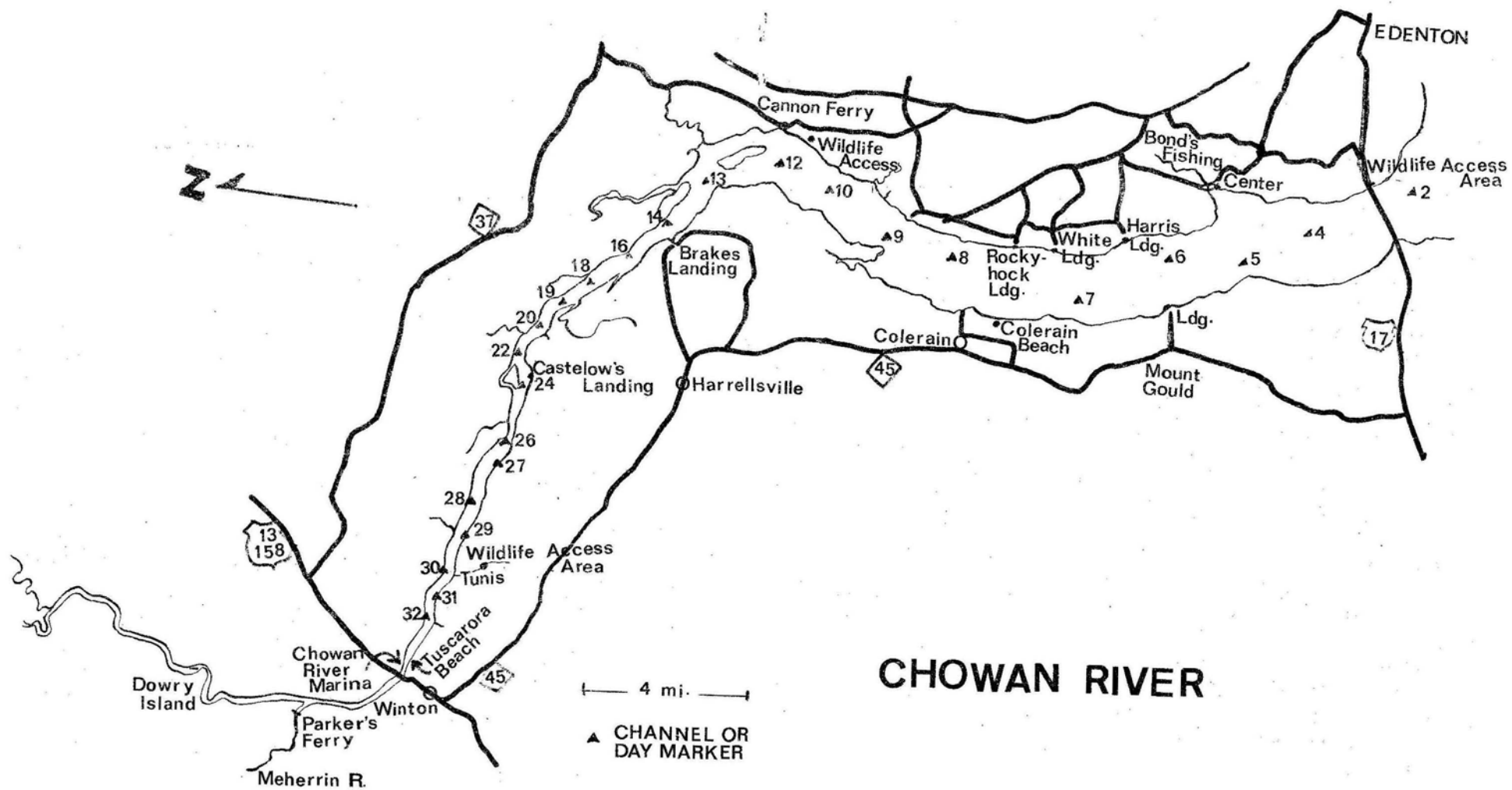
perch because they tend to overpopulate with small, stunted specimens--especially in inland reservoirs. However, in coastal streams, they attain a more desirable size.

The Chowan River is one of the coastal streams that contains a good supply of the larger size yellow perch. Specimens that weighed as much as one pound were taken at most trap net stations. Yellow perch usually spawn during early March in the Chowan River when water temperature is from 44° to 50° F. The female deposits her eggs in gelatinous ribbons along the river bottom.

Adult perch feed on young fishes, including its own kind, aquatic insects and crustaceans. No fancy equipment is needed to catch the yellow perch; the cane pole with a minnow or worm probably is the best tool. The yellow perch also readily will take artificial flies and small spinners. You usually can tell what size to expect as soon as the first yellow perch is landed in a particular location. Yellow perch travel in schools ranging from 50 to as many as 200; usually all approximately the same size; therefore, if you continually catch small specimens, you will do well to look for another fishing hole.

Striped Bass

Netting data indicate that striped bass utilize the Chowan River primarily as a feeding ground. Attention was brought to bear on this fact during a netting and tagging study during October, November and December 1970. During October and November, there were vast numbers of 3- to 5-inch menhaden in the upper portion of the Chowan. During this period, commercial and sport fishermen enjoyed good striper catches. With a mysterious disappearance of the menhaden, there also was a mass downstream migration of stripers. Likewise, during December 1970, fingerling gizzard shad were abundant in the Tunis vicinity. During this period, a total of 225 striped bass were tagged from commercial pound nets. Again with the mysterious disappearance of the gizzard shad, there was a mass downstream movement of stripers as was indicated by the return of tags from specimens captured near Edenton that previously had been tagged in the Tunis area.



It is a possibility that some stripers spawn in the Meherrin River and the upper portion of the Nottoway River. However, this theory is purely speculation as no data have been collected to substantiate it. In observing some female stripers taken from commercial nets during late April, with extremely distended bellies, one readily may assume that spawning conceivably would occur before the fish could find its way up the Roanoke River, the primary spawning stream of the North Carolina striped bass population. Fish tagged in the Chowan just prior to the spawning season, however, have been recaptured at Weldon within a month.

It is the general concensus among most North Carolina striped bass experts that the Albemarle Sound striped bass population remains within the sound system during its entire life span. This theory is not entirely correct, however, as two specimens tagged in the Chowan River ventured outside into the Atlantic. One was recaptured in the ocean off Kitty Hawk while the other was recaptured in Chesapeake Bay.

Trolling with a variety of baits is the most popular sport fishing method for Chowan River stripers. Some of the most popular baits used by striper anglers are Pet spoons, Rebels and Hot Spots.

Pumpkinseed

The pumpkinseed or "yellow belly," as it is locally known, abounds in vast numbers in the Chowan River. The pumpkinseed is an excellent panfish, and it graces many tables of Chowan River fishermen. The Chowan River pumpkinseed does not attain record breaking sizes, but its readiness to take a cricket or worm probably accounts for its popularity among area fishermen.

The pumpkinseed spawns much the same as does the bluegill, preferring to construct its nests over fine gravel or sand near logs or stumps which serve as shelter. The best spots to locate the pumpkinseed are around sunken tree tops and sunken logs. A cane pole with a cricket or a worm as bait should keep one busy pulling this gamey little fish into the boat.

Warmouth

The warmouth or "chub robin" is very plentiful in the Chowan River. The warmouth prefers sluggish waters and usually is found over a soft bottom in areas where aquatic vegetation is plentiful. The adult warmouth feeds much the same way as does the largemouth bass, usually preferring fishes as the main portion of its diet. The larger specimens spend most of the time in deep, open water.

The best time to fish for warmouth is during spring and early summer. It will readily take a variety of baits and lures.

Chain Pickerel

The chain pickerel or jack is a species that is prevalent throughout the entire Chowan River, however, hardly anyone fishes specifically for them. Most of those taken are usually caught as one is seeking some other species.

Chain pickerel are known to reach a maximum length of 3 feet and attain a weight of nearly 11 pounds. However, the average size taken by fishermen is under 20 inches and usually weighs less than 2 pounds.

Chain pickerel prefer shallow, warm waters in areas where vegetation is abundant over a mud bottom with a plentiful food supply nearby. Principally, the chain pickerel feeds on fish, but occasionally they may feed on frog, mice, and even ducklings. Estimates show that 10 to 15 pounds of food are required for a chain pickerel to gain one pound.

Chain pickerel can be caught with a variety of baits--live minnows, and trolling or casting with an array of lures.

Catfishes

The catfishes, channel, white, brown bullhead and yellow bullhead, are discussed collectively since the Chowan River contains a large population of each species. The catfishes are the leading commercial fishes of the Chowan River Basin. They

seem to have the propensity to withstand the extremely heavy commercial and sports pressure in fine fashion. Commercial devices used to capture the catfishes are wire pots, pound nets, gill nets and trot lines. Large catches are made during the fall migrations and during the spring throughout the entire expanse of the river.

An excellent sport fishery for channel catfish exists in the section of the river from Rockyhock Creek downstream to Edenton Bay during late April and early May. Wildlife protectors have confirmed catches as high as 100 catfishes by fishermen utilizing a cane pole with red worms as bait. Other fishermen prefer to use shrimp as bait. Good areas to fish for the channel catfish during the spring are around the cypress trees.

Herring

The alewife and blueback herring are discussed together since both species are referred to as "herring" by the citizens who live in the Chowan River area. The alewife or "fore-runner," as it is locally known, usually makes its appearance in the Tunis area during mid-February. The blueback or "real herring," according to local connotation, arrives in the Tunis vicinity during late March and early April. Commercial fishermen at Tunis report that the 1972 season was the largest herring run in the last ten years. Reports have it that the Perry and Wynne Fish Company, located at Colerain, is the largest processor of herring in the world. At Perry and Wynne's, they pickle and salt the herring as well as process the roe from the herring that are brought to their plant by commercial fishermen along the Chowan River.

Sport fishermen have learned that the herring will readily take small artificial lures. Wildlife protectors report having checked many fishermen who had landed a number of herring on ultra-light tackle with small spinners. One fisherman was checked whose creel contained 200 herring that had been taken with artificial bait. Perhaps the most important role of the herring to sport fishing interests is in providing forage to sustain a high game fish population.

Hickory Shad

Hickory shad or "jack shad" (coastal vernacular) ascend the Chowan River during early March enroute to their spawning areas in the upper portions of the Meherrin, Nottoway and Blackwater Rivers. Many are taken by commercial fishermen in gill nets during their spawning run. Only the roe is utilized by those that catch them since there are very few persons in the Chowan River area that eat them.

Very few sport fishermen try their luck for the hickories during their up-river journey. A fairly sizable fishery exists as the shad descend the river after having spawned. The majority of hickory shad hook and line fishing is done in the vicinity of the SCL railroad bridge at Tunis. The spawned-out hickories will readily take small spoons and shad darts.

American Shad

The American shad spawning run up the Chowan River is not of much consequence. Hardly anyone fishes exclusively for American or white shad. Most of those taken are caught incidental to the herring catch. Gill netting for shad is just about a thing of the past in the Chowan River. "Old timers" report that an immense shad run used to occur in the Chowan River during the 1940's and 50's. During the 1800's the shad fishery was one of the most important in the Albemarle Sound system. Hatcheries were established by the Federal Government and later under State auspices for the purpose of supplementing the natural spawn with hatchery stock.

Little or no sport fishing is done for American shad in the Chowan. Apparently the population is not sufficiently high to attract prospective shad anglers.

Other Fishes

The aforementioned species are those that are more important strictly from a fisherman's viewpoint. However, there are other fishes that play a vital role in the fish population balance of the Chowan River. Some of these are the gizzard shad, golden shiner, menhaden and various species of shiners. Many people never see these fishes directly. Indirectly, they

are seen since they provide a large part of the diet for many of the carnivorous species such as largemouth bass, striped bass and black crappie.

Occasionally, commercial fishermen take such saltwater species as flounder and spot in the Tunis area. Catches of walleye have been made from pound nets at Tunis and, reportedly, a limited fishery exists for this species in the Meherrin River in isolated spots. This species usually is found in the higher altitudes where the water is colder. Walleye, however, are native to the sound for, at one time, a limited commercial fishery for them existed in the tributaries and western Albemarle Sound area.

An annotated checklist of fishes collected from Chowan River by Smith (1963) and Kearson (1971) follows. However, this list does not necessarily contain all of the fishes that may be found in the Chowan River.

- Lepisosteus osseus* (Linnaeus) - Longnose gar
- Amia calva* Linnaeus - Bowfin
- Alosa aestivalis* (Mitchill) - Blueback herring
- Alosa pseudoharengus* (Wilson) - Alewife
- Brevoortia tyrannus* (Latrobe) - Atlantic menhaden
- Dorosoma cepedianum* (LeSueur) - Gizzard shad
- Umbra pygmaea* (DeKay) - Eastern mudminnow
- Esox americanus americanus* Gmelin - Redfin pickerel
- Esox niger* LeSueur - Chain pickerel
- Carassius auratus* (Linnaeus) - Goldfish
- Cyprinus carpio* Linnaeus - Carp
- Hybognathus muchalis* Agassiz - Silvery minnow
- Hybopsis leptocephala* (Girard) - Bluehead chub
- Notemigonus crysoleucas* (Mitchill) - Golden shiner
- Notropis altipinnis* (Cope) - Highfin shiner
- Notropis analostanus* (Girard) - Satinfish shiner
- Notropis chalybaeus* (Cope) - Ironcolor shiner
- Notropis cummingsae* Myers - Dusky shiner
- Notropis hudsonius* (Clinton) - Spottail shiner
- Notropis procne* (Cope) - Swallowtail shiner
- Erimyzon sucetta* (Lacepede) - Lake chubsucker
- Moxostoma pappillosum* (Cope) - Suckermouth redhorse
- Moxostoma* spp. - Redhorse spp.
- Ictalurus catus* (Linnaeus) - White catfish
- Ictalurus natalis* (LeSueur) - Yellow bullhead
- Ictalurus nebulosus* (LeSueur) - Brown bullhead
- Ictalurus punctatus* (Rafinesque) - Channel catfish

Noturus gyrinus (Mitchill) - Tadpole madtom
Noturus insignis (Richardson) - Margined madtom
Anguilla rostrata (LeSueur) - American eel
Gambusia affinis (Baird and Girard) - Mosquitofish
Fundulus notti (Agassiz) - Starhead topminnow
Chologaster cornuta Agassiz - Swampfish
Aphredoderus sayanus (Gilliams) - Pirate perch
Roccus americanus (Gmelin) - White perch
Roccus saxatilis (Walbaum) - Striped bass
Acantharchus pomotis (Baird) - Mud sunfish
Centrarchus macropterus (Lacepede) - Flier
Chaenobryttus gulosus (Cuvier) - Warmouth
Enneacanthus gloriosus (Holbrook) - Bluespotted sunfish
Enneacanthus obesus (Girard) - Banded sunfish
Lepomis auritus (Linnaeus) - Redbreast sunfish
Lepomis cyanellus Rafinesque - Green sunfish
Lepomis gibbosus (Linnaeus) - Pumpkinseed
Lepomis macrochirus Rafinesque - Bluegill
Micropterus salmoides (Lacepede) - Largemouth bass
Pomoxis nigromaculatus (LeSueur) - Black crappie
Etheostoma barratti (Holbrook) - Scalyhead darter
Etheostoma nigrum Rafinesque - Johnny darter
Etheostoma serriferum (Hubbs and Cannon) - Sawcheek darter
Etheostoma vitreum (Cope) - Glassy darter
Perca flavescens (Mitchill) - Yellow perch
Percina peltata (Stauffer) - Shield darter
Leiostomus xanthurus Lacepede - Spot

This is an example of the fine catches of bass that
 are made from the Chowan each spring and fall.

