

# Cream of the Crappie

By Brandon Keplinger



**H**ave you ever wanted to catch a crappie? Or perhaps you're an avid crappie angler, familiar with both species and the popular crappie fisheries offered within the state. If either of these conditions apply, you need to know that these moderate-sized sportfish with an intriguing appearance require some pretty stringent habitat characteristics!

West Virginia offers fishing opportunities for both crappie species -- the black crappie and white crappie. Both species, by the way, make excellent table fare. Both species are quite similar with respect to spawning, feeding and the habitats they select. We'll explore their life histories later. Right now, let's concentrate on species identification.

Taxonomically, crappie fall within the family Centrarchidae, which is the family shared by all of West Virginia's black basses (smallmouth, largemouth, and spotted bass) and other sunfishes such as bluegill and rock bass. These species possess a dorsal fin on their back with a group with a group of spines. This fin holds the key to crappie species identification. The black crappie has a dorsal fin with seven to eight hard spines, whereas the white crappie's dorsal fin begins farther towards the rear of the fish with six dorsal spines. Additionally, the dark pigmentation patterns on the sides of both fish are somewhat different. The black crappie tends to have more dark blotches that form a random pattern, or mottled appearance, whereas the white crappie's dark pigmentation forms a pattern similar to vertical bars.

Both species begin their reproductive effort at approximately the same time, although the white crappie has been noted to begin slightly earlier. The spawn begins as water temperatures near 60 degrees, usually starting in late April or early May and sometimes lasting until June. Nests are built in a circular fashion, similar to other sunfish species. Crappie, however, nest in slightly deeper water than

sunfish. Although substantial physical differences exist between white and black crappie, their similarities in spawning habitat, spawning period, and native and current distribution throughout their range has occasionally resulted in natural hybrids.

Crappies require highly productive lakes and streams. Juvenile crappies strongly depend on an abundance of large zooplankton that exists within the water column of these productive systems. Ample sunlight, nutrients and suitable water quality ensure that plenty of forage is available to support healthy, young year classes of crappie. Calm environments are crucial for crappie population success in large impoundments. Aquatic vegetation near the shoreline is also essential to protect young crappie from other predatory fish. Lake drawdowns and dewatering of backwater areas during crappie spawning can substantially reduce available habitat, expose nests with eggs, and cause further loss of aquatic vegetation. Sediment inputs from streams during heavy rains may cause lake water to become cloudy during critical growth periods. Cloudy water may obscure the vision of many fish species, causing a decrease in feeding efficiency. White crappies seem to be slightly more adapted to feeding in cloudy water than black crappie.

Because crappie, like all other fish, are cold-blooded, water temperature plays a key role. Fluctuations in water temperature may reduce the activity of young crappie, causing a decrease in feeding efficiency. Thus, temperature and rainfall may significantly impact growth rates and survival of young crappie. Furthermore, fluctuations in temperature and rainfall are uncontrollable environmental factors that make long-term management of these species difficult. Not surprisingly, crappie populations are notorious for producing inconsistent yearly numbers of surviving young in larger lakes. A large majority of harvestable-sized crappie in many lakes may consist of only one or two year classes.

Scientific literature suggests that zooplankton (small aquatic animals) comprise a large portion



Chris O'Bara



Chris O'Bara

*Black crappie (top) tends to have more dark blotches that form a random pattern, whereas the white crappie's (bottom) dark pigmentation forms a pattern similar to vertical bars.*

◀ *Black crappie*

Photo by USFWS/Eric Engbretson

of young adult crappie diets, furthering their dependence on productive systems. Additionally, as crappie age, small forage fish become a much greater part of their diet. The availability of forage fish during this time frame becomes increasingly important. Water bodies with low productivity often lack sufficient quantities of forage fish. High forage fish abundance is often necessary for the production of large quantities of harvestable and trophy-sized crappie. Lake and reservoir managers often use brush, rock piles and standing timber to increase crappie habitat and congregate fish to improve angler success. Smaller impoundments and farm ponds typically don't support large numbers of harvestable crappie. Some of these aquatic systems are actually quite productive, yielding populations that seem to experience adequate reproduction, but the fish in these populations typically exhibit stunted growth. This results in a population composed mainly of small, unharvestable individuals. However, some information suggests that crappie may be controlled "from the top down" in some of these



*Stonewall Jackson Lake provides excellent crappie fishing opportunities.*

Steve Shaluta

more productive, larger-sized small impoundments. "Top down control" means an overabundance of small, stunted crappie may be consumed by larger, predatory fish stocked to control the population. As a result, more food sources may be available to the remaining crappie, and growth rates may increase. As crappie become larger, they may be able to capitalize on a larger, underused food source. This often results in bigger fish which increases angler satisfaction. Other small impoundments and farm ponds are often unproductive, experiencing populations with both unsatisfactory numbers of harvestable-sized fish and poor reproduction.

West Virginia state waters offering fine crappie fishing opportunities include several large lakes (Bluestone, Burnsville, East Lynn, R.D. Bailey, Sleepy Creek, Stonewall Jackson, Sutton, Summersville and Tygart) and the backwaters of the Ohio River. Small, minnow-imitating lures such as artificial jigs, spoons, crankbaits and sinking stickbaits fish well when presented in and around submerged woody habitat. Those habitats which incorporate standing timber seem to be especially productive at times. Natural baits such as minnows, wax worms and meal worms are also excellent for catching crappie. However, if you collect or purchase minnows or crayfish for live bait fishing, remember that it is unlawful to release unused bait into state waters.

*Brandon Keplinger is the assistant district fisheries biologist stationed in Romney.*



Dave Fattaleh

*Proud angler holds a black crappie.*