

## **Arkansas Pond Bulletin**

**March 2024**

### **Quick Hit: Sunfish for Pond Stocking**

The "Sunfish" are a family of North American freshwater fishes that includes crappie, black bass, rock bass, flier, bluegill and the like. Often though, when someone uses the term "sunfish" regarding freshwater fish, they are referring to the Lepomids, a genus known as the "true sunfishes" that includes bluegill, redear sunfish, green sunfish, longear sunfish, warmouth, and more. "Bream" is another term commonly used referring to this group. This genus includes some of the most brilliantly colored freshwater fish in North America (pumpkinseed, orangespotted sunfish, longear sunfish) but also the workhorse of pond fisheries, the bluegill. The numerous similar-looking species in this genus, including several that are readily available for pond stocking, can lead to confusion as to which ones are appropriate for pond stocking and what their role in the pond ecosystem will be.

The sunfish species most commonly available for pond stocking are the northern (sometimes referred to as common or native) bluegill, coppernose bluegill, hybrid bluegill and redear sunfish. Northern, or common/native, bluegill are varieties native to your state or region. They are well adapted to the environment and tolerant to the local climate. These tend to be the standard bluegill variety available from local hatcheries as they should provide consistent good performance in their role of providing forage for larger sportfish, such as black bass, crappie and catfish, and to provide sportfishing enjoyment when they get larger.

Coppernose bluegill are a sub-species of bluegill, not a hybrid, native to the Florida/Georgia region of North America. Under favorable conditions, coppernose will grow larger and faster than northern bluegill but they are not as tolerant of cooler climates. While empirical studies have not confirmed this, many pond managers have observed that the growth advantage of coppernose over northern bluegill ends around Arkansas/Tennessee and winter mortality of coppernose increases farther north with consistent winter ice cover. Ponds in southern Arkansas very likely can achieve faster growth and larger sizes from coppernose, while ponds in northern, especially northwestern, Arkansas may see no difference in growth and higher winter mortality in coppernose vs northern bluegill. Coppernose reproduction is similar to northern bluegill, allowing them to provide primary forage for larger sportfish in addition to their larger growth potential as adults.

Hybrid bluegills are the first-generation offspring (known as the F1 generation) of a cross between a bluegill and another Lepomid species, usually a green sunfish for fish meant to be stocked in ponds. Their mouths are larger than typical bluegill, allowing them to eat larger food items and lures earlier. They are also known for being more aggressive and more easily caught than typical bluegills. Hybrid bluegill are advertised as faster and larger growing than typical bluegill, but there is nuance to that claim. The majority, 85-95% of hybrid bluegill are males, which contributes to suppressed reproduction. This limits the population of hybrid bluegills which allows each fish a larger portion of resources to utilize. Bluegill can spawn several times during the warm season and can quickly overpopulate ponds that lack proper population control measures. Generally, the fewer fish in a pond, the faster and larger each fish will grow under good conditions. Under ideal conditions with good controls on population size and no habitat or forage limitations, studies and professional observations have shown that typical bluegill can actually outgrow hybrid bluegill. Additionally, subsequent generations of hybrids, the F2, F3 etc., grow noticeably slower and smaller than their F1 predecessors. Hybrid bluegill are best in limited specific situations; small ponds where bluegill are intended to be the primary sportfish and where roughly annual supplemental stocking of fresh hybrid fingerlings, or full pond renovation and restocking every 5-10 years when sizes decline to unsatisfactory levels, can be carried out. Largemouth bass and/or channel catfish should be stocked with hybrid bluegill to consume the inferior offspring. Understand though, that largemouth bass in a hybrid sunfish pond are only there to control the hybrid population, not grow large. If largemouth bass or crappie max size is the goal, do not stock hybrid bluegill.

All varieties of bluegill grow exceptionally well when provided daily fish feed. Higher protein (40% or higher) floating feeds provide better results than lower protein feeds. Feed as much as they will eat within 5 to 10 minutes at least once per day when the water is above about 65°F.

Redear sunfish are stocked primarily as a parasite control measure. Snails, one of the preferred diet items of redear sunfish, can serve as intermediate hosts of parasitic yellow grubs. These grubs usually are not lethal for fish, but they certainly can reduce fitness and produce unsightly cysts in the fins and filets that owners find unappealing. Stocking redear sunfish to consume snails can help prevent the parasites from completing their life cycles and thus, prevent them from establishing in the fish. Redear do not reproduce enough to serve as a primary forage source for larger sportfish, and they usually only occasionally contribute to the fishing experience partially due to their diet and their lower population in ponds.

Each fish species stocked into a pond must serve a purpose in line with the goals of the pond. The species of sunfish available for stocking may look similar, but each has

unique characteristics that make them better suited for certain situations over others. Having a clear set of goals, understanding what role your sunfish need to play towards those goals, and stocking the proper sunfish variety will help achieve a successful and enjoyable fishery.

### **What to Watch Out for in March:**

Aquatic weeds emerge in March. DIY plant ID resources can be found at Texas A&M's Aquaplant "Identify a Plant" directory <https://aquaplant.tamu.edu/>. The MP556 (<https://www.uaex.uada.edu/publications/pdf/MP556.pdf>) contains photos of most common problematic aquatic weeds in Arkansas along with management guidance. There is also an aquatics section in MP44, covering herbicide selection and precautions.

### **Pond Management Tasks for March:**

Fertilization and feeding programs can begin this month when the water reaches about 65°F. Early season herbicide application can begin for emerging aquatic weeds. Aquatic dye for vegetation control will need more frequent booster doses during the spring rainy season to maintain appropriate concentrations. This is a favorable time for fish stocking. Periodically inspect drains and spillways to clear debris and clogs. If aeration systems were deactivated for winter, it is time to re-activate them.

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