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Redbreast Sunfish (Lepomis auritus) Management and Fishing in Pennsylvania

Prepared by R. Lorantas, B. Frick, PFBC Warmwater Unit; and Fisheries Management Biologists

2018 Update

Goal: Maintain or enhance Redbreast Sunfish sport fisheries through harvest management of naturally sustained Redbreast Sunfish populations and through habitat preservation and enhancement.

Redbreast Sunfish occur in stream and river (lotic) habitats throughout Pennsylvania's Atlantic slope river Drainages: Delaware River, Susquehanna River, and Potomac River Drainages. The Susquehanna River Drainage includes the West Branch Susquehanna River and Juniata River Drainages. The Delaware River Drainage includes the Lehigh River and Schuylkill River Drainages. Redbreast Sunfish are very rare in lake and pond (lentic) habitats. Redbreast Sunfish are unknown in the Ohio River and Lake Erie Drainages.

Redbreast Sunfish populations are managed for sport fishing through harvest management. Anglers may be curious as to the size some species, such as Redbreast Sunfish can attain in Pennsylvania waters. A state record for Redbreast Sunfish is not maintained, but for reference to size potential, we note that one of the largest Redbreast Sunfish captured by PFBC biologists exceeded 9 inches and weighed 0.64 pounds. Below, we illustrate the growth of Redbreast Sunfish in Pennsylvania, and note that a 7-inch Redbreast Sunfish is approximately 4 years old (Figure 1) and weighs about 0.2 pounds (Table 1). Redbreast Sunfish are not stocked to maintain populations in Pennsylvania. Instead, abundance management is geared toward harvest regulation in terms of fisheries management. Inland regulations accommodate harvest of 50 panfish, combined species, which includes Redbreast Sunfish and other species. No minimum size limit or seasonal restrictions apply. Redbreast Sunfish are generally considered a prolific species, which has led to liberal harvest rules. Our Warmwater and Coolwater fishing map provides a broad selection of waters where Redbreast Sunfish fishing opportunities can be found in Pennsylvania.

Apart from inland harvest regulation programs and Panfish Enhancement Regulations, Pennsylvania Fish and Boat Commission biologists have also collaborated with biologist in neighboring states to develop harvest regulations that apply to border waters in order to sustain high quality fishing experiences. These waters include the Delaware River and tributaries. Border water regulations applying to these locations may differ from inland harvest regulation and can be found elsewhere on this website. Anglers should consult the current Summary of Fishing Laws and Regulations and reference and abide by harvest rules applicable to boundary waters they fish.

Biologists regularly sample fish populations and measure their density and size structure, fish habitat is also described by measuring water productivity and other chracteristics. Following such evaluations, management plans are prescribed to enhance density and size structure of Redbreast Sunfish within resource limits. In association with these evaluations, growth of Redbreast Sunfish is examined by measuring length, weight, and taking a scale sample to determine age. We have tabulated average ages and weights for a variety of lengths of Redbreast Sunfish in Pennsylvania (Table 1). Anglers find these tables useful in approximating the weight and age of their catch. It should be known that weight and age based on length varies between individuals and across populations. Fish length at age depends on a variety of factors including habitat, gender, genetics, forage abundance, and other conditions. In standard biological collections, the decrease in relative or absolute number of Redbreast Sunfish at each age can be used to describe their total annual mortality rate. In addition to measuring losses, biologists index production of young Redbreast Sunfish by examining age structure of assessment catches. Growth, recruitment of young to the population, and loss of older Redbreast Sunfish are important considerations in developing harvest regulations that produce desirable size Redbreast Sunfish for harvest. Habitat enhancement involves careful evaluation of a water body's physical, biological, and chemical characteristics. The Pennsylvania Fish and Boat Commission has an active corps of volunteers that assist in placement of fish habitat structures after an approved plan has been developed. We encourage organizations interested in volunteering time to contact our Habitat Unit for more information.

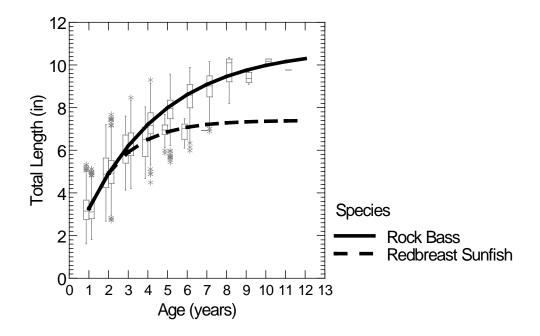


Figure 1. Average length at age of Redbreast Sunfish and Rock Bass (*Ambloplites rupestris*) collected by fisheries biologists in assessment gear in Pennsylvania (July-September).

| fisheries biologists in Pennsylvania (March-June). | | |
|--|--------|-------|
| Inches | Pounds | Years |
| 4.5 | 0.1 | 1.4 |
| 5 | 0.1 | 1.7 |
| 5.5 | 0.1 | 2.1 |
| 6 | 0.1 | 2.5 |
| 6.5 | 0.1 | 3.1 |
| 7 | 0.2 | 4.0 |
| 7.5 | 0.2 | 5.6 |
| 8 | 0.3 | > 5.6 |
| 8.5 | 0.4 | > 5.6 |
| 9 | 0.5 | > 5.6 |
| 9.5 | 0.6 | > 5.6 |
| 10 | 0.7 | > 5.6 |
| 10.5 | 0.8 | > 5.6 |

10.50.8> 5.6Tabulating catch and harvest by anglers from various waterways is essential in developing harvest regulations.
Information derived from these creel surveys frequently yields information of interest to anglers since seasonal
peaks in catch occur for most species. Redbreast Sunfish can be caught in most any time of year, generally
though, highest catch per hour occurs in fall in rivers (Figure 2). Since Redbreast Sunfish defend nests in late
spring and early summer in association with spawning and brood guarding, adults can be concentrated and
quite vulnerable to anglers. With fishing destinations identified from maps on this site and information
describing the best seasons to catch Redbreast Sunfish, anglers need only select an effective bait or lure. Most
anglers catch Redbreast Sunfish drifting a worm or minnow in any near-shore habitat. Small jigs, spinners,
spoons, and crank baits can be effective baits. The abundance of Redbreast Sunfish in central and eastern
Pennsylvania rivers and streams makes them an especially popular panfish among youthful anglers. Redbreast
Sunfish, Pennsylvania's "river sunfish", are fun to catch by anglers of all ages.

A <u>summary of Redbreast Sunfish information</u> including fishing tips, species identification, and more can be found elsewhere on this website. Additional information helpful in answering angling questions can be found on the <u>Fishing FAQs</u> page located elsewhere on this website.

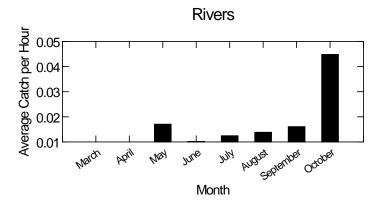


Figure 2. Average catch per angler hour, by month, of Redbreast Sunfish from Pennsylvania rivers.