

EUROPEAN RUDD

Scardinius erythrophthalmus

The European rudd is a medium-sized fish belonging to the carp and minnow family. It is largely carnivorous when young, feeding on snails, insects, small crustaceans, and even smaller fish; but tends to prefer aquatic vegetation as it gets older.

Photo courtesy of Sean Rafferty, Pennsylvania Sea Grant.



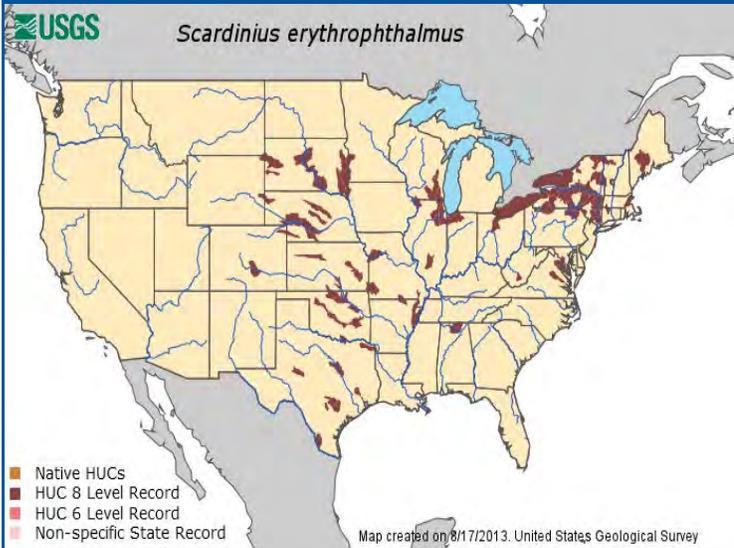
SPECIES DESCRIPTION

The body of the rudd is somewhat stocky and robust with large scales and a forked tail. The mouth is distinct with a sharply-angled, protruding lower lip. Coloration is brownish-green above, brassy yellow to rosy on the sides, fading to silvery underneath. The pectoral, pelvic, and anal fins are a distinctive bright reddish-orange color. The iris of the eye is yellow to orange, often with a red spot that can cover the pupil. Another identifying feature of the rudd is the beginning of its dorsal fin set well behind the front of the pelvic fin. Average size is

up to 48 cm (19 in) in length. These features are useful for distinguishing the rudd from look-a-like species like the golden shiner, which has pale colored fins and lacks the red spot on the iris.

NATIVE & INTRODUCED RANGES

Native to Europe and western Asia, the European rudd was introduced to the United States in the late 19th century, probably as a game and food fish. Since its introduction it has spread throughout most of the country and has been collected in 21 states as well as parts of the Great Lakes system. In Pennsylvania, the rudd has been collected in Lake Erie and its tributaries, the Allegheny Reservoir in Warren County, and Lake Winola in Wyoming County.



Map courtesy of United States Geological Survey.

BIOLOGY & SPREAD

Bait bucket release is the primary mechanism by which the rudd has moved into open waters. Because of its similarity to native shiners, they are often misidentified and sold as bait; therefore, intentional or accidental release by anglers has helped this species spread.

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 RUDD

Photo courtesy of Michael Kesi, Biolib.cz, (Encyclopedia of Life).



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Photo courtesy of Pennsylvania Sea Grant.



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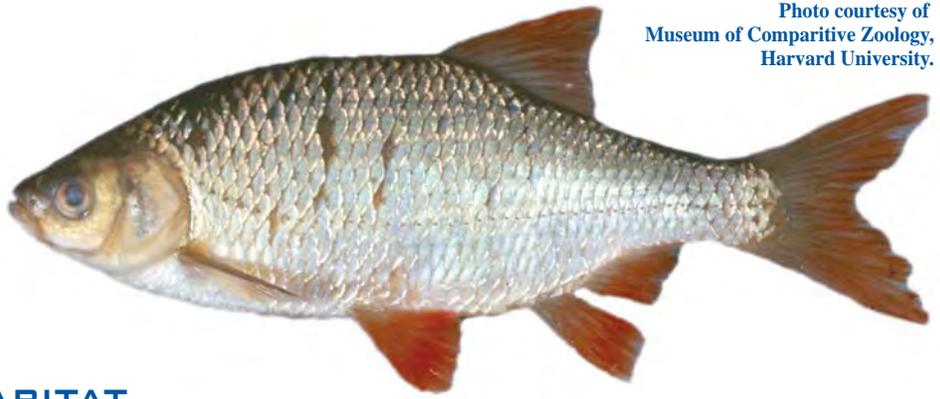
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Photo courtesy of
Museum of Comparative Zoology,
Harvard University.



HABITAT

The European rudd prefers still and sluggish waters and weedy shoreline areas of lakes and rivers, but it can adapt to a wide range of environmental conditions, including poor water quality.

IMPACTS

Threat to Biodiversity

Laboratory studies have confirmed that the rudd can hybridize with the golden shiner, a primary forage species of many game fish. This may have detrimental effects on the genetics of native shiner populations. Unlike most native fishes, the rudd is an omnivore and can change its diet from insects and minnows to aquatic plants, creating competition with native fish for food sources. The population dynamics of an ecosystem can change because rudd can deplete aquatic vegetation and potentially reduce the reproductive success of native fish that use near shore areas for spawning and nursery sites. Since it quickly outgrows predators, they are of little use as a food source for other fish, and they lack the natural predators to keep their population numbers in check.

PREVENTION & CONTROL

Anglers, commercial fishermen, and fishery professionals should learn to identify the rudd, and always check for and remove any plants, mud, and debris from boats, trailers, clothing, and equipment before leaving a water body. Since young rudd can resemble baitfish, it's important to drain water from bait buckets, bilges, and livewells before transporting to new areas, and dispose of unwanted live bait in the trash. Clean and dry all equipment, and never use rudd as bait.



Photo courtesy of
Pennsylvania Sea Grant.

References:

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