

Reading: Cichlids Past & Present

The cichlids of Lake Victoria in East Africa are remarkable not only for their variations in color and in their parental attentiveness as mouthbrooders, but also for their ancestral origins. Within this one (very large) lake live 300 or more distinct species of cichlids (see picture below). Some are bottom-feeding algae-eaters; some eat snails, others mollusks (like clams and mussels), others fish; some only eat fish scales; and still others prefer only the eyes of fish. In spite of these differences, the cichlids are astonishingly the same at the level of their DNA. In some cases, they differ only by one nucleotide. All of the different species of cichlids in Lake Victoria have evolved from a single ancestral species within the last 750,000

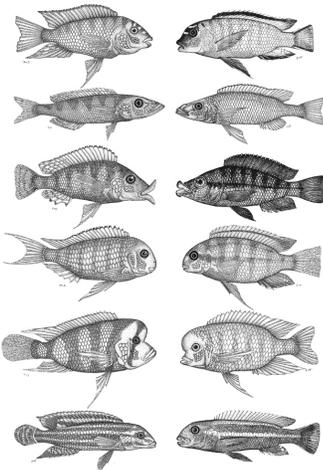


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In 1959, British colonists introduced the Nile perch to the lake. The Nile perch is a sports fish that grows to almost 2 meters (more than 6 feet) in length. A voracious predator, this fish is responsible for undoing thousands of years of evolution in a single gulp by decimating the cichlid population and eliminating many species. In doing so, this large fish has upset the ecosystem balance of the lake by removing the algae-eating cichlids. In the absence of the cichlids, huge growths of algae, called algal blooms, fill the lake. When these blooms die and decompose, the oxygen content of the lake is reduced. This results in a decline in the population of other fish, crustaceans, and other biotic members of the ecosystem.

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