TOPEKA SHINER (Notropis Topeka)

Description
The Topeka shiner is a small, stout minnow up to 3 inches in length. A dark lateral line extends from behind the eye to the base of the tail and ends with a distinguishing dark chevron (>) at the base of the tail. However, this chevron can be indistinct, making identification difficult. The Topeka shiner is olive-green to gold colored above the lateral line and silvery-white below. During mating season, the cheeks and fins of males turn reddish-orange. They eat midge larvae and other aquatic invertebrates.

Distribution
There are 9 records of the Topeka shiner in Nebraska of which only two are considered extant with the remaining seven records being historic. The historic distribution of the species was the eastern third of the state from Knox county in the north to Adams county and Saline counties in the south. The two recent records are from Taylor Creek in Madison county and Brush Creek in Cherry county. A stable population occurs in the Blue River drainage just south of the Nebraska/Kansas state line. This indicates the species distribution may extend into the Blue River basin in the southeast portions of Nebraska. The potential distribution of the species is considered to be the eastern half of the state.

Habitat
Characteristic Topeka shiner habitat is small, including areas of quiet, open headwater prairie streams with cool temperatures and good water quality. Typically the substrate is clean cobble, gravel, or sand; in some areas it is bedrock or clay hardpan overlain with fine silt. The streams are usually perennial although they may approach intermittency in the summer. In pools of intermittent streams, cool water temperatures are maintained by groundwater seepage or spring flows. The Topeka shiner is usually found in the pools and runs of streams as opposed to riffles or along the banks. The Topeka shiner has also been found in old oxbows and sloughs that are normally isolated from the main stream but receive flow-through during high water events.

Status
Global: G3-Vulnerable. Federally Endangered. State Endangered. Nebraska: S1-Critically Imperiled. There is a small range in six states in the Great Plains region; remaining populations were becoming increasingly fragmented and threatened, but the species is now receiving much more conservation attention in states where previously it was not receiving any attention, so more populations have been discovered or rediscovered; some threats have been reduced. The major threats are land and water practices that alter characteristics of streams. The fish is fairly resistant to natural, short-term stress but sensitive to permanent changes such as reduced water quality and increased water temperature.

Management
Consider conducting surveys to determine presence of species on streams having characteristic shiner habitat within the historic range and especially within and adjacent to 8-digit Hydrologic Unit Areas (HUA) having known populations. Preclude the construction of tributary dams and stock ponds on perennial or intermittent portions of streams with populations of the Topeka shiner. Prevent/eliminate dewatering of streams. Prevent and reduce siltation and pesticide runoff into streams by establishing adequate buffer strips and agricultural practices to reduce erosion and runoff. Prevent conversion of grassland to cropland and initiate grazing practices to improve grassland condition. Prevent threats from introduced piscivorous (fish-eating) fish. The streams should not be altered in any way.

More Information
http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=E07R