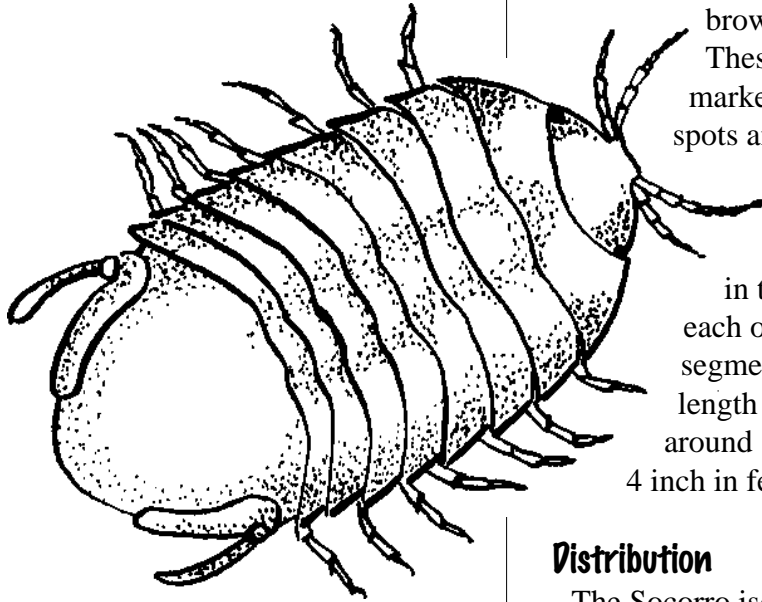




WILDLIFE NOTES

Socorro isopod



distinct segments that are grayish-brown in color.

These segments are marked with black spots and lines that run together and form a black band

in the center of each of the thoracic segments. The total length in males is around 1/2 inch and 1/4 inch in females.

Distinguishing Features

The Socorro isopod (*Thermosphaeroma thermophilum*) is an aquatic isopod that belongs to the family Sphaeromatidae. The Socorro isopod has two pairs of oar-like appendages attached to its abdomen, which distinguishes it from other aquatic isopods. This isopod is the only member of its family known in New Mexico. Its aquatic habitat makes it unique from its land relatives, which are sowbugs and pillbugs.

Descriptive Details

The Socorro isopod has eyes and two pairs of antennae on the head. The abdomen has two

Distribution

The Socorro isopod is native to central New Mexico and is confined to Sedillo Spring, near Socorro, in Socorro County.

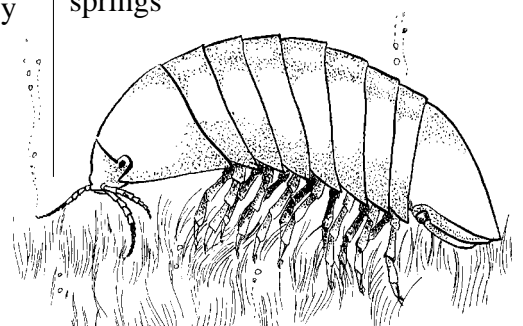
Biology

The Socorro isopod lives in thermal spring waters, where temperatures range from 77 to 91 degrees F. Their native habitat consists of only one small pool and spring brook that are among the remains of a thermal spa called The Evergreen, which flourished at Socorro in the early 20th century. Aquatic earthworms called tubifex represent a primary food for the species. Detritis and small animals are also part of the diet, and even cannibalistic behavior has been observed. Socorro isopods have been observed in

feeding clusters-where injured animals were consumed by other aggressive isopods. The females incubate their eggs in a marsupium (pouch) where the young hatch and swim from their mothers' protection. Under laboratory conditions, brood size is 3 to 57 young-with the average about 16. The gestation period is approximately 30 days. Females are able to produce broods every two months if enough food and proper temperatures are available. The number of pregnant females is apparently at a peak in April and declines to a minimum number in late summer. Male isopods are protective of their mates and will form a breeding pair that lasts up to several days while swimming about their habitat. This behavior helps to increase reproductive success.

Status

The Socorro isopod is currently known to occupy only one spring system. In the recent past it may have occurred at other springs

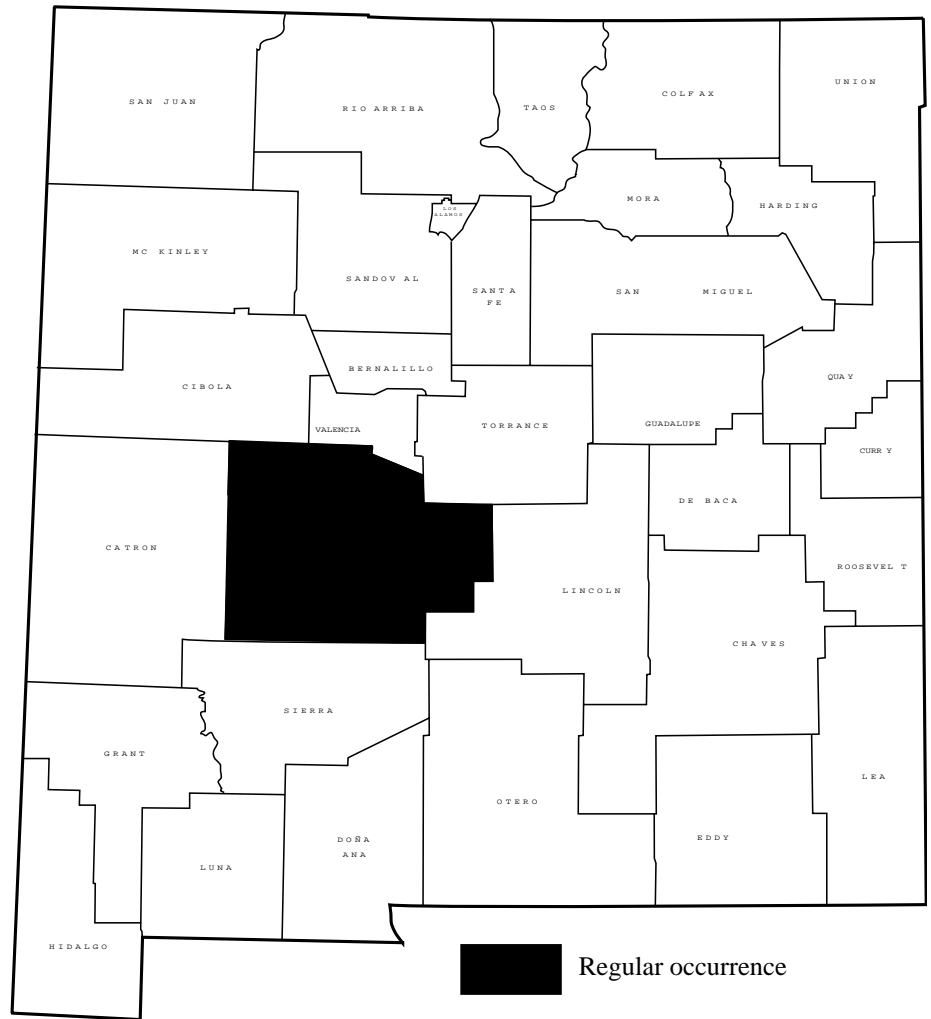


in the vicinity of Socorro, New Mexico, including two that were capped during the past century. In August 1988 the entire population died out at the spring when the flow of water became obstructed and the habitat dried up. Fortunately, a population of the isopod, which was housed at the University of New Mexico, saved the species from extinction, and a transplant has restored it to Sedillo Spring.

Conservation

Survival of this species in the wild depends on maintaining an uninterrupted warm water supply to Sedillo Spring. Attempts are being made to make sure that water is available in the area of traditional habitat. Also, an artificial habitat, the Socorro Isopod Propagation Facility, has been constructed near Sedillo Spring, which will help the isopods' prospects of survival. The establishment of captive populations at other sites would also reduce the chances of this unique species from becoming extinct.

Revised 2003
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**Wildlife Notes is published by
 the Department of Game and Fish.
 If you are interested in obtaining
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 Department of Game and Fish
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 Santa Fe, NM 87504
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