grown well. Foraging about within the algae and rock are three species of shrimp. These beautiful little creatures, such as the red-backed cleaning shrimp (Lysmata grabhami), demonstrate the vivid colors that these tiny animals may possess.



A mandarin fish in Denver Zoo's Tropical Discovery. (Photo: R. Haeffner)

Often burrowed in the gravel, showing only its large cryptic claws, the porcelain crab (Calappa-sp.) hides waiting to scavenge its next meal. Two species of sea urchin may be found grazing on the Caulerpa. The porcupine-like spines of the longspined urchin (Diadema mexicanum) are used not only for protection but also for locomotion over the coral reef. To the casual observer, it may be difficult to see that the urchin is closely related to the sea star, another echinoderm. There are several species of sea stars in the invertebrate exhibit, offering only a taste of the variety of sizes, shapes and colors in which sea stars may be found.

Joining this multitude of marine invertebrates are a variety of small fishes which would be typical for invertebrate-rich regions of the coral reef. The mandarin fish (Pterosynchiropus splendidus), with its elaborate colors and pattern, stays close to the substrate as it constantly searches for tiny crustaceans on which to feed. A variety of other gobies may also be seen darting among the invertebrates, and others will be added in the near future.

Pete Fippinger, keeper, in Zoo Review (Spring 1996)

Detroit Zoo, Michigan, U.S.A.

Over 50 golden mantella frog eggs hatched recently at the zoo. Egg clutches were found in five out of six enclosures housing this species, two of them containing tadpoles almost ready to emerge from their gel mass. In the on-exhibit enclosure, no egg clutch was ever really found - only the tadpoles, happily swimming in the pool provided for them. Actually, these tadpoles could easily be from the other species of Mantella we currently house, the painted mantella. as both are on exhibit together, in an enclosure specifically designed to -stimulate-successful-reproduction. These animals lay eggs in dark areas close to the water. When tadpoles hatch, they wriggle from their gel capsule across the moist substrate until they find water. There, in four to six weeks, they metamorphose into extremely tiny froglets, which feed on even tinier insects. If we successfully metamorphose these tadpoles. Detroit Zoo will be one of only five institutions that have ever bred this taxon; if the painted variety were successfully metamorphosed, we would be the first U.S. institution to breed this species.

Other frog news includes three other species that we will be trying to stimulate to breed within the next month the waxy tree frog, the casque-headed tree frog. and the hour-glass tree frog. It appears that we currently have gravid specimens of all three species. so in the next few weeks rain chambers will be set up to stimulate these animals to successfully lay fertile eggs. While many institutions have recently set up groups of poison-arrow frogs and other similar species. very few zoos and aquariums set their sights on tree frogs. This is probably because many species of tree frog are nocturnal and therefore difficult to exhibit properly. Without a doubt, however, our waxy tree frogs are among the most interesting amphibians on exhibit. Many visitors do not believe that these animals are actually alive, some remarking that they look very much like 'Silly Putty'!

Andrew Snider, Curator, Reptiles and Amphibians, in *Inside Tracks* Vol. 3, No. 3 (April/May 1996)

Fossil Rim Wildlife Center, Glen Rose, Texas, U.S.A.

The first southern black rhino born at Fossil Rim made its appearance on 29 December 1995. The 55-pound (25) kg) female was the only surviving birth of a southern black rhino in the U.S.A. during 1995. The new addition is the offspring of two wild-caught rhinos from Zimbabwe who were translocated to the United States along with eight others in April 1992. The mother is believed to be around 15 years old and had produced at least one calf in the wild. After successfully breeding at Fossil Rim, the seven-year-old father was translocated again in November 1994 to Western Plains Zoo, Australia, to join their herd of six females, which were

also translocated from Zimbabwe. The birth took place thanks to recent research results using a relatively noninvasive procedure known as transrectal ultrasonography. The mother was conditioned to the use of this procedure through positive behavioral reinforcement. Fossil Rim's animal care and health team is perfecting the use of ultrasonography to study the reproductive biology of both white and black rhinos at the Center.

G. Rankin in AZA Communiqué (May 1996)

Houston Zoo, Texas, U.S.A.

The zoo recently reported the breeding of the magpie shrike (Corvinella melanoleuca). Native to eastern and southern African savannahs, these birds breed cooperatively - one pair nests, and the other group members assist in raising the chicks. The zoo has been able to duplicate this situation by maintaining pairs in the same exhibit, which has led to the successful fledging of two chicks. The birds are presently raising another brood of three chicks, and the two older siblings are helping their parents. Although this species is rare in captivity, it is still numerous in the wild. though threatened by agricultural practices. It has been captive-bred only at Houston Zoo and subsequently at a private avicultural facility in New York state. Both facilities are cooperating with husbandry methods and data collection.

T. Todd and C. Plassé in AZA Communiqué (May 1996)

Melbourne Zoo, Australia

The zoo currently holds 15 species of frogs, and in recent years has been