mist-netting ultramarine lories. Hampered by the unseasonable rains caused by Hurricane Omar, the total capture was seven lories, all of whom were kept for six days before being transferred by boat to Fatu Hiva. In Fatu Hiva, the inhabitants of the town of Omoa visited the caged birds and learned about the translocation program. The lories were then released in a foothill valley above Omoa, in an area rich in food plants, especially coconut and banana. All individuals were released at first light and began to feed on coconut flowers in minutes. Within one hour, their foraging activities took them high into the hills and out of contact with the human observers.

The birds will be monitored in the future by an employee of the Rural Economy Service who will make field observations and will collect data from other island residents. This translocation program will continue on an annual basis to provide enough founder birds to establish the ultramarine lory on Fatu Hiva.

Contributed by Cyndi Kuehler and Alan Lieberman, ZSSD.

Great One-horned Rhinos

Further to our article on rhino re-introductions into the Dudhwa N.P. India (RE-INSTRUCTION NEWS 3), Dr. S.P. Sinha writes that two more calves were born in July and August 1991, to Nepalese and Assamese cows. Unfortunately, another adult female originating from Nepal died after an abortion and internal infection in September, leaving behind a 2.5 year old calf. The current population at Dudhwa comprises one bull, four cows and five calves.

Sir Christopher Lever points out that, as well as the rhinos in reserves in Assam and Bengal, India, and the Royal Chitwan N.P. Nepal, 14 rhinos have been successfully re-introduced from Chitwan to the Royal Bardia National Park in western Nepal. During a visit to Bardia on behalf of the International Trust for Nature Conservation from 30 March to 3 April 1991, he and Dr. Charles McDougall had seven separate sightings of rhino, including a pair copulating, with the male wearing a radio collar.

Arabian Sand Gazelle

The three species of gazelle once native to Saudi Arabia - the Saudi gazelle (Gazella dorcas saudiya), the mountain gazelle (Gazella gazella) and the sand gazelle (Gazella subgutturosa marica) - have been greatly reduced over the last fifty years. The catastrophic decline in their populations began after the Second World War, when new roads and four-wheel drive vehicles opened up areas previously inaccessible to humans. The Saudi gazelle is now probably extinct in the wild, the mountain gazelle is considered vulnerable and the sand gazelle is endangered.

The latter is widely distributed in Asia, from southern Turkey to western China. In the Arabian region, four subspecies are recognized from Iran, Baluchistan, Southern Turkistan and Sinkiang, to the Gobi desert. While the sand gazelle has historically been distributed throughout Saudi Arabia, today it only exists in two Saudi populations - one in Al Harrah, a protected area close to the Jordanian border, and the other in Al Khunfa, an area south of Al Harrah.

The general decline of the wild population of sand gazelles has led to immediate conservation measures. The last two known populations are now under protection and a captive breeding programme has been established at the King Khalid Wildlife Research Centre (KKWRC) in Thumamah, near Riyadh. With the support of the National Commission for Wildlife Conservation, these captive-bred animals have already been re-introduced into Mahazat As Said - a 2,200 km² fenced area east of Taif, where sand gazelles were apparently once very abundant.

24 gazelles (10 males, 14 females) were transported from Thumamah to Mahazat As Said in February 1990, followed by a second group of 28 animals (11 m, 17 f) one year later. In June 1991, 22 animals (14 m, 8 f) obtained from a farm in the Al Qasim region of Saudi Arabia were also moved to Mahazat As Said. Most recently, in May 1992, 23 Thumamah-bred individuals (17 m, 6 f) were transferred into this area. All animals transported to Mahazat As Said were kept quarantined in a 25 hectare enclosure for five to six months.

The first three groups of the sand gazelle have already been released in the wild: 36 animals in May 1991, 35 in March 1992 and 21 in September 1992. The fourth group is currently in the pre-release enclosure.

Although most animals transported from KKWRC to the release area were born during January and March, two peaks in calving were observed in Mahazat As Said: February to April and September to October. To date, nine calves are known to have been born in the wild - five in September and October of 1991 and four in March and April of 1992, each group including a set of twins. While the availability of favourable conditions in the small pre-release pens may have influenced reproductive behaviour, current field studies will delineate reproductive synchrony in released gazelles.

So far, carcasses of two released gazelles have been recovered in the reserve, but causes of death have not yet been determined.

Plans for an intensive radio telemetry study and aerial survey are currently underway.

Contributed by Md. Nayerul Haque, National Wildlife Research Center, Taif, Saudi Arabia.