

forest over 50 years. *Biological Journal of the Linnean Society* Vol. 97, No. 4, 801–809.

Origins of the Javan rhino population in Ujung Kulon

It was recently suggested that the entire population of the Javan rhinoceros in Ujung Kulon National Park was annihilated by the effects of the eruption of Krakatoa in 1883. However, a review of contemporary reports (van Strien and Rookmaaker, 2010) has shown that people survived the waves and remained settled in one village until 1906, when it was evacuated during a plague of tigers. The first report of a rhino in the peninsula of Ujung Kulon dates from 1857, and the animals were occasionally reported from the area afterwards. There is no indication from the available estimates and sightings that rhinos were exterminated in the area. Ujung Kulon has been a protected area since 1921, and rhino numbers ranged upwards to about 40 or 50 for most of the period until 1949. There are no grounds for thinking that the present animals descend from a new founder population established after the 1883 eruption.

Reference

van Strien, N.J., and Rookmaaker, K.: The impact of the Krakatoa eruption in 1883 on the population of *Rhinoceros sondaicus* in Ujung Kulon, with details of rhino observations from 1857 to 1949. *Journal of Threatened Taxa* (<http://threatenedtaxa.org>) Vol. 2, No. 1 (2010), pp. 633–638.

Which countries have the most endangered species?

After examining the IUCN data, a researcher has compiled the following list. These are the countries that have the greatest number of Endangered Species according to the 2009 IUCN Red List:

1. Ecuador – 2,211 species;
2. United States – 1,203 species;
3. Malaysia – 1,166 species;

4. Indonesia – 1,126 species;
5. Mexico – 900 species;
6. China – 841 species;
7. Australia – 804 species;
8. Brazil – 769 species;
9. India – 687 species;
10. Philippines – 682 species.

Animal Keepers' Forum Vol. 36, No. 12 (December 2009)

A cure for egg-eating?

One of the many trials that plague aviculturists is the bird that eats eggs as soon as they are laid. Usually it is the cock which is the culprit, although I have known a hen who, immediately after laying, would turn round and spike the egg.

Many remedies have been suggested to discourage this behaviour, most of which involve filling eggshells with an unpleasant substance in an attempt to deter the villain. Personally, I have never found this to work well – sometimes the culprit even seems to develop a taste for the nasty matter that I have (messily) put into the shell. Separating the sexes on alternate days can work well but requires a double aviary, or an aviary plus house, to be practical, and the hen needs to be regular in her laying routine.

Some breeders try to confuse their birds by scattering golf balls around the aviary, on which they can peck away until they tire of it. Other breeders in America have taken this idea further and devised a plan which they claim is 100% effective: they tire the birds with eggs! Every day, the aviary is strewn with chickens' eggs. Initially the eggs are all eaten avidly, but within a few days the birds apparently become tired of eating them and soon consumption ceases completely. The wanted eggs can then be safely laid and collected. I must stress that I have not yet tried this scheme myself, but will experiment with an egg-eating golden pheasant cock this spring.

Tim Lovel in *WPA News* (World Pheasant Association) No. 84 (Winter 2009/10)

INTERNATIONAL ZOO NEWS

Al Wabra Wildlife Preservation, Qatar

Between 15 and 28 October 2009, no fewer than four (3.1) critically endangered Somali wild asses (*Equus africanus somaliensis*) were born at Al Wabra. The foals were sired by Hector, who arrived from Montpellier Zoo, France, in April 2008 as part of an exchange within the EEP, with which AWWP participates. Oddly, Hector was never seen mating with the mares – but proof that he successfully did so is obvious. The four foals frequently play together on their favourite site – the rocky mountain within the wild asses' spacious enclosure.

We received our initial group of two stallions and four mares from Europe in April 2003. To keep the animals in suitable surroundings, four separate enclosures (two of 12,000 m² and two of 6,000 m²) and a stable with ten boxes (4 × 4 m each) plus storeroom, were constructed in the gravel and stony desert of Qatar prior to their arrival. The births of the four latest foals have increased the total number of wild asses at AWWP to 18.

AWWP press release

Alpenzoo Innsbruck-Tirol, Austria

The Alpenzoo has defined itself as a 'thematic zoo' since its foundation in 1962. This is why only species of native alpine fauna are kept. So some hatchings in our aviaries are of special interest, because these species are rarely displayed in other zoos.

A pair of Ural owls (*Strix uralensis*) have consistently bred since 2007. During the past three years a total of seven chicks have been raised and later given to the Austrian release project for Ural owls.

Even more rarely seen in other zoos are spotted nutcrackers (*Nucifraga caryocatactes*) and mountain rock thrushes

(*Monticola saxatilis*). Both species successfully bred at the Alpenzoo in 2007.

Keeping rock partridges (*Alectoris graeca*) and rock ptarmigans (*Lagopus mutus*) is very complex because of diet and hygiene concerns. Six rock partridge chicks in 2007 and one rock ptarmigan chick in 2008 were successfully raised.

In 2008 our pair of little bitterns (*Ixobrychus minutus*) were moved into a new aviary, containing authentic alluvial forest species. That year they produced three clutches, from which five young birds were successfully reared, and in 2009 two further chicks followed. Little bitterns are to be found in only eight European zoos. Recently a new pair was formed at Zürich Zoo from birds bred at Burgers' Zoo, the Netherlands, and the Alpenzoo.

Private breeders keep many more corncrakes (*Crex crex*) than zoos. This rail species tends to stay hidden, mostly at ground level, so it is an advantage if zoo visitors cast an eye on the floor of the aviary. This is the present situation at the Alpenzoo, where corncrakes reared two chicks in 2009.

It is important to mention that all breeding and rearing at the Alpenzoo was carried out by the natural parents.

Dirk Ullrich

Auckland Zoo, New Zealand

The kakapo (*Strigops habroptilops*) had a bumper breeding season during 2009. This extraordinary flightless and nocturnal bird, the world's heaviest parrot, has seen its population increase from 91 to 124 birds. The strong masting of rimu trees is the reason for the breeding explosion.

Endemic to New Zealand, the kakapo is today found only on sanctuary islands – Codfish Island off Stewart Island, and Anchor Island in south-west Fiordland.