

# Evidence based decision making for reintroduction success: translocating threatened prey reptiles into an endemic predator-packed system in Mauritius.

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## BACKGROUND

Mauritius, recognised as a biodiversity hotspot and of high importance for conservation, hosts a particularly high proportion of endemic species [1].

One such species is the lesser night gecko, *Nactus coindemirensis* [2] (Figure 1,3), which is classified as vulnerable by the IUCN RedList [3].

Non-native species displaced many of the endemic reptiles to Mauritius [4], including the lesser night gecko.

The main population of lesser night geckos is found on Gunner's Quoin, with approximately 18000 individuals [5]. There are also small populations on Pigeon House Rock and Ilot Vacoas (see Figure 2).

In 2011, 75 lesser night geckos were translocated to Ile Marianne, a small island with no predators, providing baseline data on the species [5].

The lesser night gecko provides a good model species to reintroduce to Round Island, being the most numerous of the threatened reptiles, however Round Island is also home to native predators of the lesser night gecko [5].



Figure 1: Illustration of a mature lesser night gecko, *Nactus coindemirensis*.

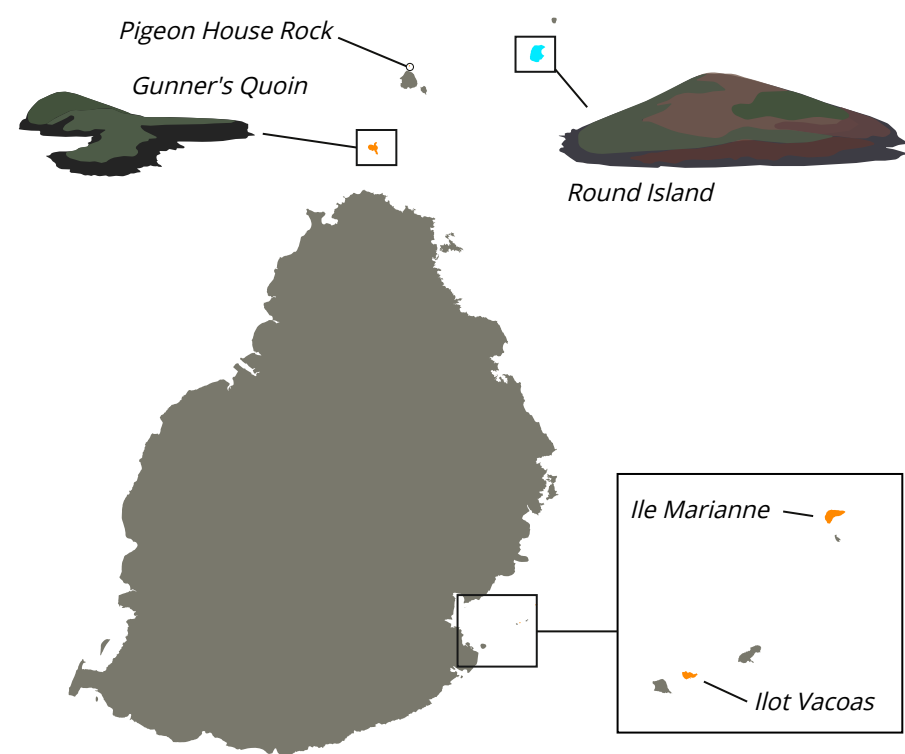


Figure 2: Map of mainland Mauritius. Lesser night geckos (*Nactus coindemirensis*) are present on islands shaded orange, the translocation site, Round Island, is shaded blue.

## AIMS:

- REINTRODUCE LESSER NIGHT GECKOS TO ROUND ISLAND, MAURITIUS
- USE MODELING TO PREDICT EFFECT OF NATIVE PREDATORS ON TRANSLOCATED GECKOS
- ASSESS SUCCESS AT POPULATION AND ECOSYSTEM LEVEL
- BUILD GUIDELINES FOR TRANSLOCATION OF THREATENED REPTILE PREY SPECIES

## METHODS:

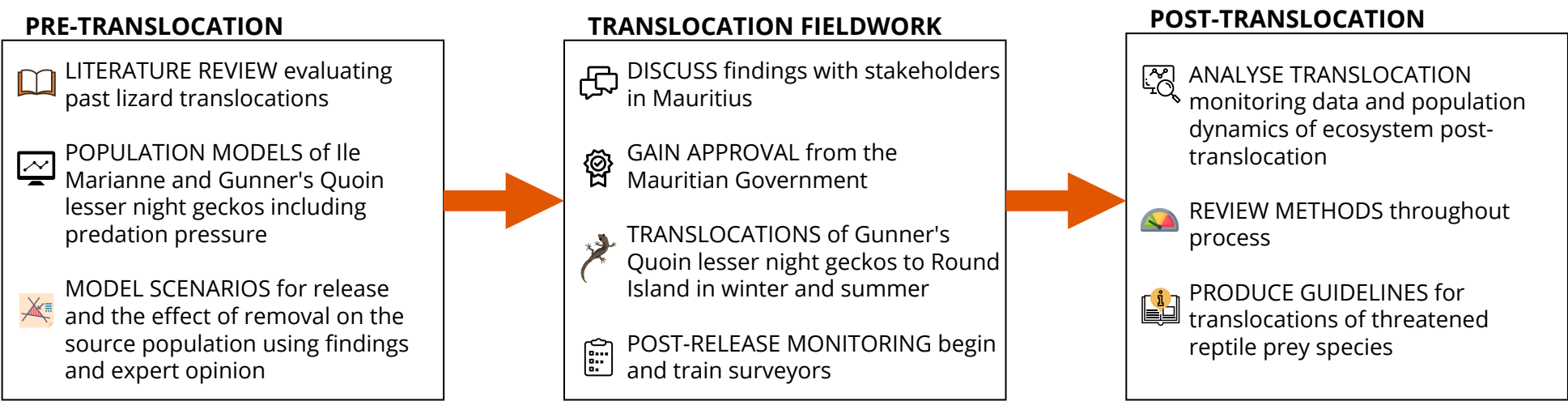


Figure 3: Mature lesser night gecko, *Nactus coindemirensis*. Photo by Dr Nik Cole, Durrell Wildlife Conservation Trust.

References: 1. Myers et al. (2000) Nature; 2. Bullock et al. (1985) J. Zoology; 3. Jones & Cole. (2004) IUCN RedList; 4. Cole et al. (2005) Biol. Conserv.; 5. Cole, Durrell Wildlife Conservation Trust, personal communication, meeting 08/10/2019.

