

STATEMENT ON THE OCCURRENCE AND HABITAT PREFERENCE FOR THE CRITICALLY ENDANGERED BARE-RUMPED SHEATHTAIL BAT *SACCOLAIMUS SACCOLAIMUS* ON THE PROPERTY OF KINGS PLAINS, QUEENSLAND

It has been confirmed very recently (Nov 2015) that the bare-rumped sheath-tail bat *Saccolaimus saccolaimus* occurs on Kings Plains Station, a leasehold property about 50km due west of Cooktown. The clearest observations so far have been made along the banks of the Normanby River by acoustically detecting flying and hunting bats at night and identifying them by a diagnostic (echolocation) calling pattern. This method for the positive identification of *S. saccolaimus* has been discovered only recently (Coles et al 2012) and historically this species has been notoriously difficult to capture.

The very poor knowledge of the distribution and habitat requirements for this species, together with few museum specimens, have contributed to its EPBC critically endangered status (Coles et al 1999). For example very few roosts have ever been found and no permanently occupied roost sites are known at present. A primary concern for the conservation of *S. saccolaimus* is the loss of suitable habitat principally for roosting (Coles et al 1999). In Queensland, the presence of this species is most likely linked to the distribution of tropical rainforest and adjacent forest types with suitable roosts.

The importance of finding *S. saccolaimus* on Kings Plains is the association with rainforest patches along the major rivers since this bat is primarily a rainforest species (Meutstege et al 2014; IUCN 2015), being extralimital in Australia (Churchill 2008; IUCN 2015). This bat belongs to a group of 'open foragers' (emballonurids and molossids) that typically hunt above the forest canopy. Their fast direct flight style imposes a preference for roosting in taller trees such as emergents, particularly in areas where there is unobstructed air space at canopy height that facilitates exit and entering roosts. It is therefore quite significant that *S. saccolaimus* has been found in association with rainforest remnants along the Normanby River as these areas contain tall emergent *Eucalyptus tereticornis*. Moreover, the difficulty of, or absence in, finding *S. saccolaimus* away from these rivers, particularly in the dry season, tends to imply that this bat may depend on riparian roost sites for its survival in this general area. Seasonally, the local population may well disperse during the wet and retract during the dry, but its presence is contingent on the fact that suitable roost tree species exist, and that those are highly likely to be found in the emergent eucalypts associated with the rainforest pockets along the Normanby River.

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3 December 2015

Relevant literature

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