

The Distribution and Status of the Marbled Frogmouth in New South Wales



Terania Creek Inquiry 1981

- male of southern subspecies
Plumed Frogmouth
Podargus ocellatus plumiferus



- cryptic, poorly known
- few museum specimens
- only one credible nest record
– Wilson NR 1987



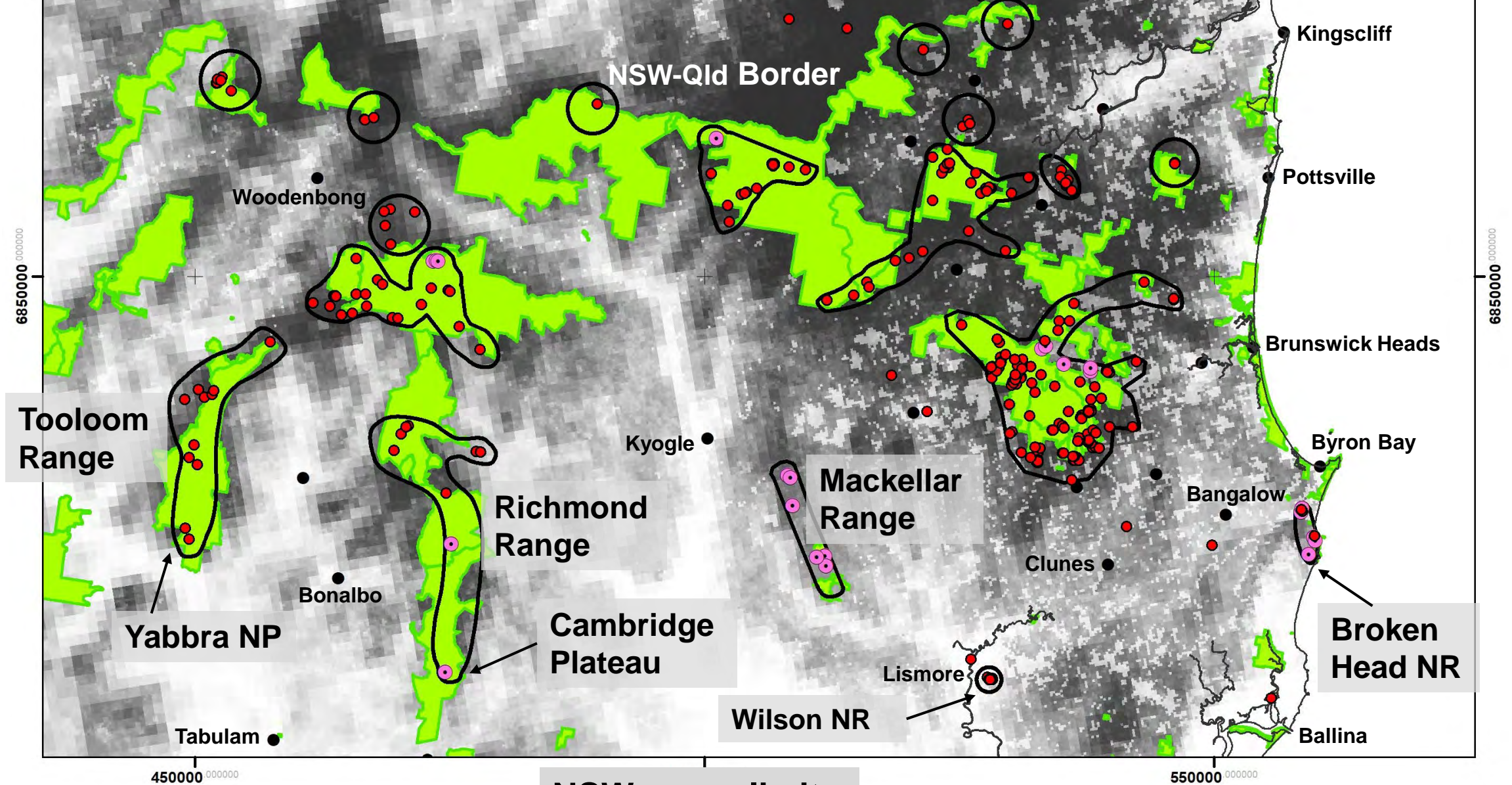
- sexually dimorphic - females lighter, smaller, browner plumage
- forest interior species
- sedentary pairs, 8-18ha territories (Smith *et al.* 1997)
- key habitat attributes large trees, large woody vines, epiphytes, Bangalow Palm stands, permanent/semi-permanent streams – “luxuriant” rainforest



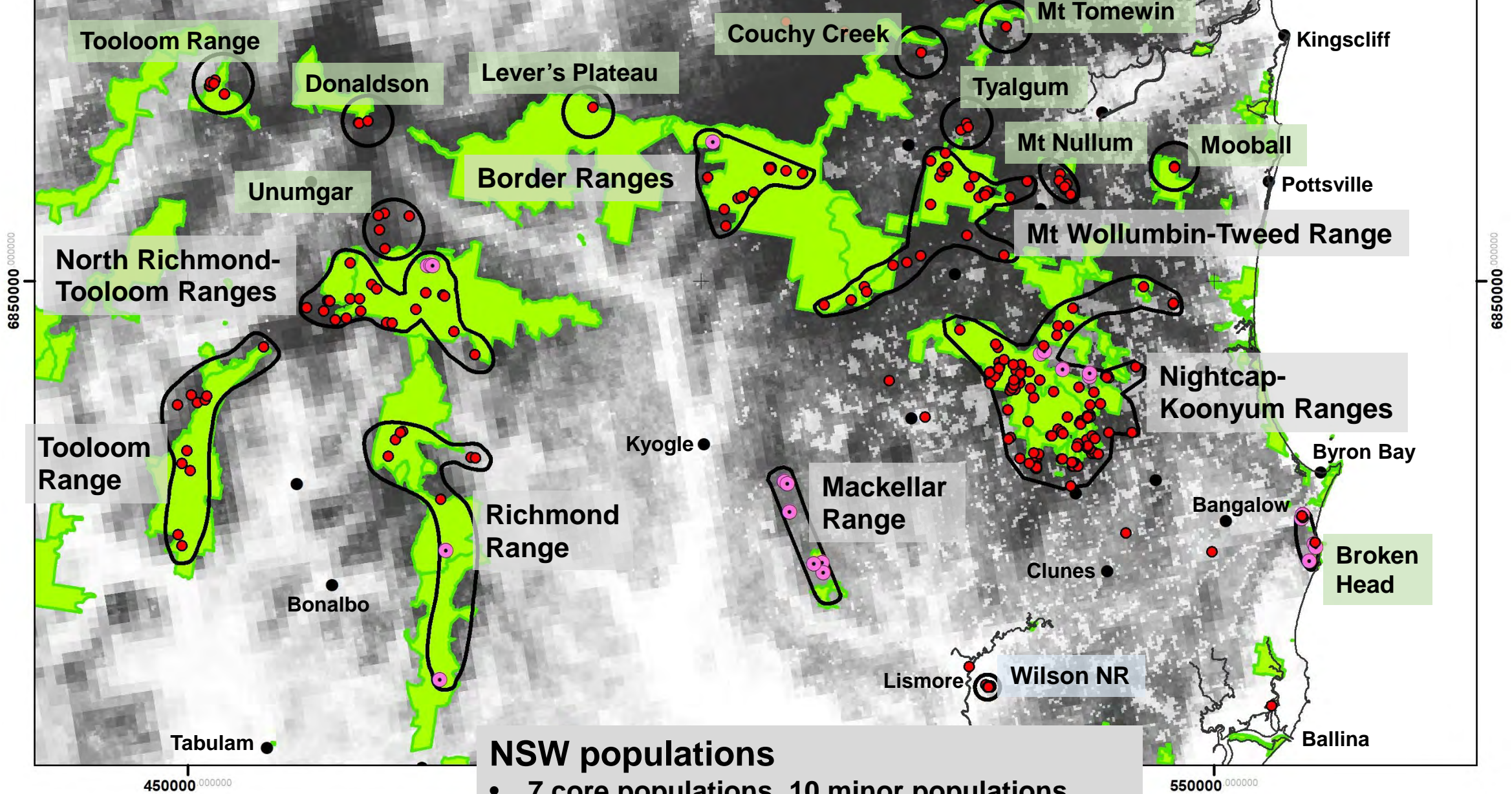
- forages sub-canopy, mid-stratum, occasionally forest floor, takes beetles, crickets, grasshoppers, cicadas, cockroaches, spiders
- roosts low vine tangles, on small branch/vine against trunk large tree

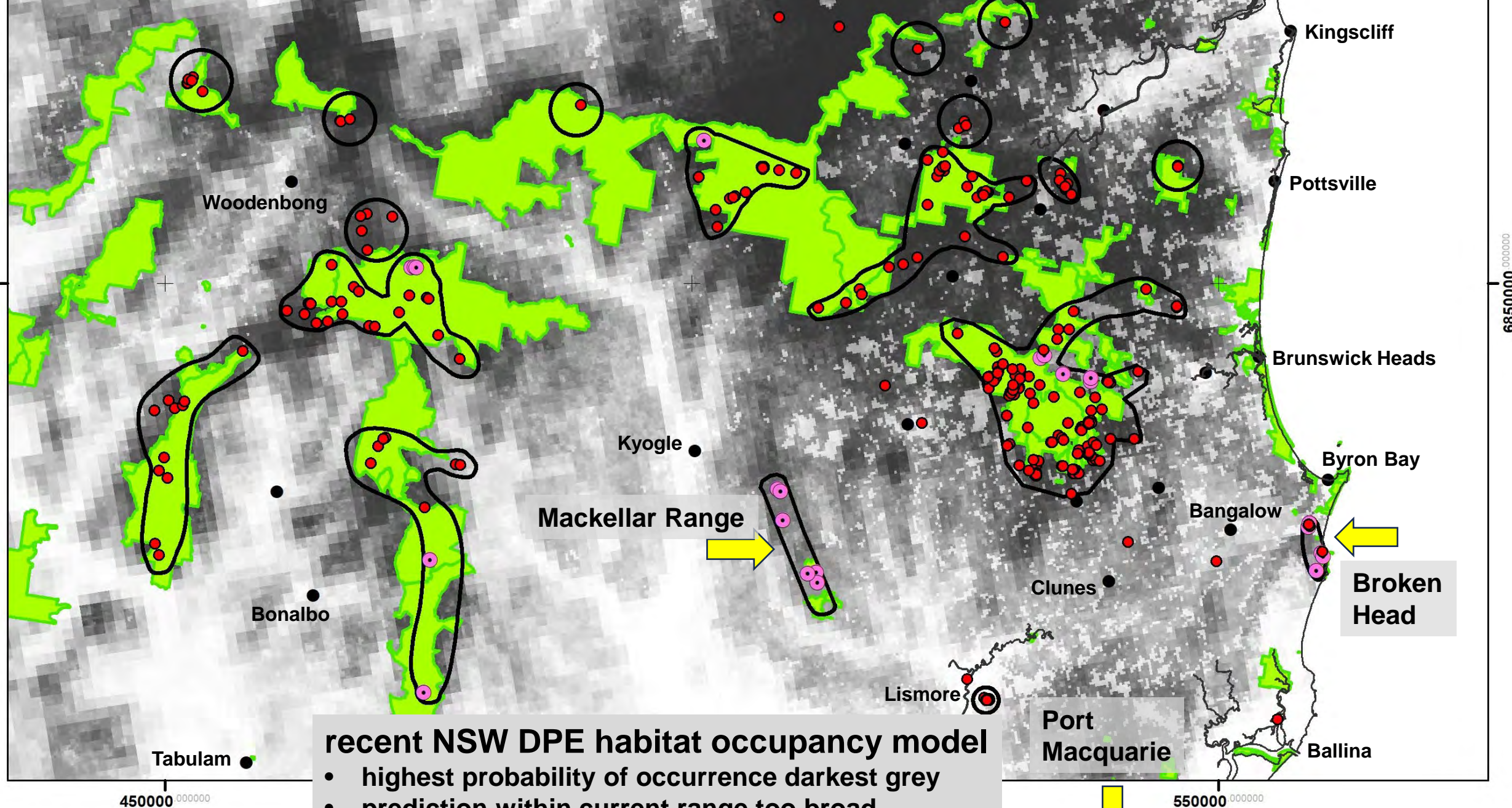


- lowland subtropical rainforest specialist in CEAR
- largely absent high elevation subtropical rainforest, dry rainforest, littoral rainforest, temperate rainforest
- occurs in contiguous wet sclerophyll forest upslope to ridges



0 5 10 20 Kilometers

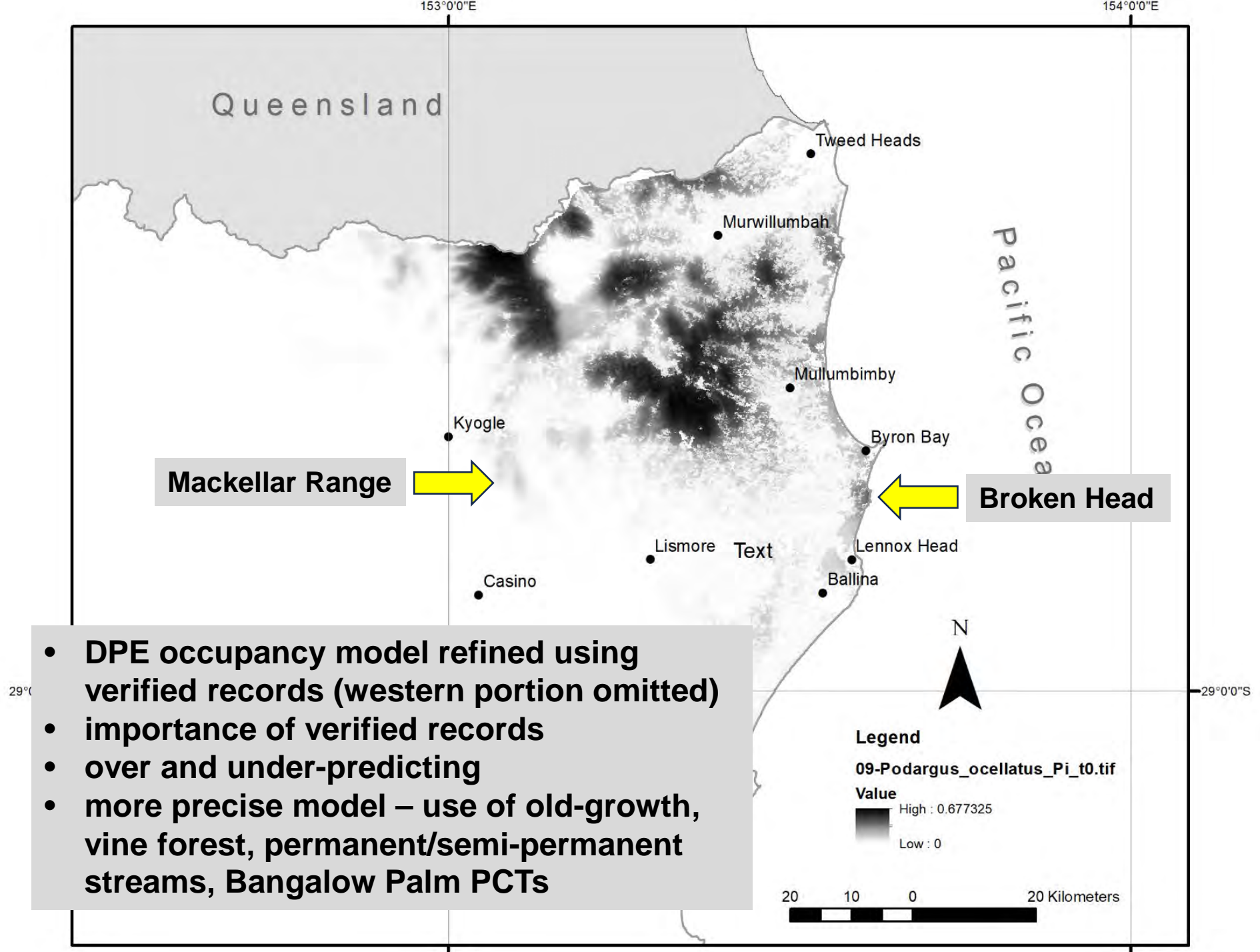




recent NSW DPE habitat occupancy model

- highest probability of occurrence darkest grey
- prediction within current range too broad
- substantial over-prediction to south

Legend





CEAR *Podargus ocellatus plumiferus*

Cape York *Podargus ocellatus marmoratus*

“leap-frog” pattern of distribution

- Irian origin (lowland New Guinea), likely recent coloniser of CEAR
- indications able to cross gaps of 20km wide or more
- more adaptable to climate change?





- increasingly severe dry seasons
- higher evaporative demand
- increasingly frequent and severe droughts
- increasing incidence of hot fires
- unfavourable survival prognosis for Plumed Frogmouth as species requires stable microclimate, high moisture levels, old-growth forest habitat attributes
- additional evidence of absence from 1,700km gap between CESR and Cape York rainforests





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