

**Advice to the Minister for Sustainability, Environment, Water, Population & Communities  
from the Threatened Species Scientific Committee (the Committee)  
on Amendment to the list of Threatened Species under the  
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)**

## 1. Name

*Rostratula australis* (Australian painted snipe)

The species is commonly known as the Australian painted snipe. It is in the Family Rostratulidae.

## 2. Reason for Conservation Assessment by the Committee

This advice follows assessment of information provided by a public nomination to transfer the Australian painted snipe from the vulnerable category to the endangered category.

The Australian painted snipe is listed as threatened under legislation in a number of states and territories (see table below).

State	List/legislation	Listing status	Listed name
Queensland	<i>Nature Conservation (Wildlife) Regulations 2006</i>	vulnerable	<i>Rostratula australis</i>
New South Wales	<i>Threatened Species Conservation Act 1995</i>	endangered	<i>Rostratula benghalensis australis</i> *
Victoria	<i>Flora and Fauna Guarantee Act 1988 – Threatened List – October 2010</i>	threatened	<i>Rostratula australis</i>
South Australia	<i>National Parks and Wildlife Act 1972</i>	vulnerable	<i>Rostratula benghalensis</i> *
Western Australia	<i>Wildlife Conservation (Specially Protected Fauna) Notice 2010(2)</i>	rare or likely to become extinct	<i>Rostratula benghalensis australis</i> *
	Threatened and Priority Fauna ranking	vulnerable	
Northern Territory	<i>Territory Parks and Wildlife Conservation Act 2000</i>	vulnerable	<i>Rostratula benghalensis australis</i> *

\* see Section 4 for summary of taxonomic history

The Committee provides the following assessment of the appropriateness of the species' inclusion in the endangered category of the EPBC Act list of threatened species.

## 3. Summary of Conclusion

The Committee judges that the species has been demonstrated to have met sufficient elements of Criterion 1 to make it eligible for listing as **endangered**.

The Committee judges that the species has been demonstrated to have met sufficient elements of Criterion 3 to make it eligible for listing as **vulnerable**.

The highest category for which the species is eligible to be listed is **endangered**.

## 4. Taxonomy

The species is conventionally accepted as *Rostratula australis* (Gould 1838).

Until recently, the Australian painted snipe was considered to be a subspecies of *Rostratula benghalensis* (greater painted snipe) that occurs across Africa and Asia (Marchant and Higgins, 1993).

Lane and Rogers (2000) recommended treating the subspecies found in Australia (*R. benghalensis australis*) as a separate species (*R. australis*) based on morphological differences. The Australian painted snipe is now accepted as a full species (Baker et al., 2007; Christidis and Boles 2008; Garnett et al., 2011) and is the only member of the genus *Rostratula* that occurs in Australia (del Hoyo et al., 1996).

The Australian painted snipe differs from the greater painted snipe (of Africa and Asia) in being long-winged with proportionately short bill and tarsus, and can be distinguished on several plumage features (Lane and Rogers, 2000). The greater painted snipe also has a distinctive advertising call; the Australian painted snipe has almost never been heard to make this call and it is possible that differences in trachea structure prevent them from doing so (Lane and Rogers, 2000).

## 5. Description

The Australian painted snipe is a stocky wading bird approximately 240–300 mm in length, with a wingspan of 500–540 mm and weighing 125–130 g (Birds Australia, 2012). The adult female is more colourful and larger than the male. It has a chocolate-brown head with chestnut patch in the nape, a comma-shaped white marking around the eye and metallic green back and wings, densely barred olive and black (Rogers, pers. comm., 2012). A diagnostic white ‘harness marking’ runs from the mantle onto the breast (Rogers, pers. comm., 2012). It has a brown eye, white belly, bluish-green legs and long pink-orange bill darkening towards the tip (Reader’s Digest, 1997).

The male resembles the female but is smaller and has a duller head pattern (Rogers, pers. comm., 2012). It has a mottled grey-brown head and neck, with buff stripe down the centre of the crown and through the eyes. Wings and back are barred black, buff and white, and the breast has a broad black band (Reader’s Digest, 1997). There is no seasonal variation in the plumage of the Australian painted snipe. The juvenile is separable though very similar to the adult male (Marchant and Higgins, 2003).

The Australian painted snipe is a well-camouflaged species that is rarely seen. It is generally seen singly or in pairs, sometimes forming loose gatherings around a group of nests (BirdLife Australia, pers. comm., 2011). Post-breeding flocks of up to 30 individual birds have been recorded (BirdLife Australia, 2012). The species has been described as a ‘skulking but striking and unmistakable snipe-like wader’, similar to *Gallinago hardwickii* (Latham’s snipe) but smaller and with a shorter bill, broader and distinctly more rounded wings, shorter tail and longer legs (Marchant and Higgins, 2003).

## 6. National Context

The Australian painted snipe is endemic to Australia and has been recorded at wetlands in all states and territories (Barrett et al., 2003; Blakers et al., 1984). The species is most common in eastern Australia, where it has been recorded at scattered locations throughout much of Queensland, New South Wales, Victoria and south-eastern South Australia. It has been recorded less frequently at a smaller number of locations in western South Australia, the Northern Territory and Western Australia (Barrett et al., 2003; Blakers et al., 1984; Marchant and Higgins, 1993; Rogers et al., 2005). There are two published records of the species occurring in Tasmania, the most recent from 1912 (Hall, 1910; Green, 1989).

Important areas for this species in the past have included the Murray-Darling Basin (particularly the Riverina of Victoria and New South Wales), Queensland Channel Country, Fitzroy Basin of Central Queensland, south-eastern South Australia and adjacent parts of Victoria (Rogers et al., 2005). Concentrated records exist for the area around population centres (Adelaide, Melbourne, Sydney, Brisbane and Newcastle); this could reflect the relative abundance of shallow wetlands on extensive sub-coastal plains and/or the higher number of observers in these areas (Rogers et al., 2005). Records published over the past twenty years provided evidence for the species occurring more widely and frequently in the remote arid and tropical regions of Australia than previously thought (Hassell and Rogers, 2002; Jaensch 2003a, 2003b; Jaensch et al., 2004; Black et al., 2010). Jaensch (2009) presents detailed records from the Diamantina and Georgina River catchments within the Lake Eyre Basin of inland Australia, including evidence of breeding.

This widespread species occurs in many Natural Resource Management (NRM) Regions and Interim Biogeographic Regionalisation for Australia (IBRA) Bioregions across Australia. It primarily breeds in the Murray-Darling Basin (Marchant and Higgins, 1993).

## 7. Relevant Biology/Ecology

The Australian painted snipe lives in shallow freshwater (occasionally brackish) wetlands, both ephemeral and permanent, such as lakes, swamps, claypans, inundated or waterlogged grassland/saltmarsh, dams, rice crops, sewage farms and bore drains, generally with a good cover of grasses, rushes and reeds, low scrub, *Muehlenbeckia* spp. (lignum), open timber or samphire (Reader's Digest, 1997; Marchant and Higgins, 2003). The species is nomadic and when an area begins to dry up, becomes flooded or gets too cold the birds move away (Marchant and Higgins, 2003).

There is increasing evidence that the Australian painted snipe disperses from east to central and northern Australia for at least part of the year to exploit favourable seasonal conditions (Black et al., 2010). It is probable that a significant proportion of the eastern Australian population migrates to coastal tropical Queensland in February to August and also to inundated wetlands in western Queensland when these are available (Black et al., 2010).

The Australian painted snipe is most active at night, dawn and dusk, sitting quietly under grass or reeds during the day. Its diet includes aquatic insects, grasshoppers, crickets, earthworms and some plant seeds. Australian painted snipes generally remain in dense cover when feeding but may also forage over nearby mudflats, ploughed land or grassland (Marchant and Higgins, 2003). The bill is adapted to probe in soft mud (Reader's Digest, 1997).

When cornered, the Australian painted snipe exhibits an impressive defence display. It fans out its wings and tail, facing the predator, presenting a body area four times its normal size. An individual may hiss and growl, or freeze when disturbed (Reader's Digest, 2007). They fly low (<3 m) over land or water when flushed but may fly higher when travelling long distances (Marchant and Higgins, 2003).

Breeding occurs from December to May in the north of the country and October to December in the south (Morcombe, 2008). The sex roles of the Australian painted snipe are unusual. The female is more brightly coloured and takes the initiative in courtship, mating with any available male. The male builds the nest, incubates the eggs (usually four) and rears the young, which hatch after 19-20 days (Morcombe, 2008) covered in dense down (Reader's Digest, 2007). During this time the female will seek out other males.

While the species can be found in a range of wetland habitats, its requirements for breeding are more stringent (Rogers et al., 2005). Continuous reed beds, stands of reed-like vegetation, rice fields and areas with no surrounding low cover are avoided (Rogers et al., 2005). Nests are made among tall rank tussocks, frequently on small, muddy islands or mounds surrounded by shallow fresh water, sometimes on shores of swamps or on banks of channels (Marchant and Higgins, 2003). Nesting typically occurs in ephemeral wetlands that are drying out after an influx of water, provided they have complex shorelines and a combination of very shallow water, exposed mud and dense low cover (Rogers et al., 2005).

The generation length of the Australian painted snipe is estimated to be 8.6 years (BirdLife International, 2011). This is derived from an average age at first breeding of 1.0 year and a maximum longevity in the wild of 16.2 years, both extrapolated from the mean of other shorebirds (Garnett et al., 2011).

## 8. Description of Threats

### Known threats

Past declines of this species have been caused by the loss and degradation of wetlands, through drainage and the diversion of water for agriculture and reservoirs (Lane and Rogers 2000; Garnett et al., 2011). The loss of breeding habitat in the Murray-Darling Basin has occurred through: (1) the reduced frequency of flooding in previously suitable habitat, exacerbated by a loss of fresh water to irrigation and other diversions; (2) water levels being stabilised in remaining wetlands so that water becomes too deep,

or continuous reed beds develop; and (3) changes to vegetation through increased cropping, and possibly through altered fire regimes at some sites (Rogers et al., 2005).

These hydrological changes have occurred in parallel with an extended period of drought in Australia. September 2010 marked the end of a 14 year drought in both south-east Australia and south-west Australia, characterised by recurrent dry spells, less autumn and winter rainfall in most years and an absence of very wet periods (BoM, 2010). Such conditions have exacerbated the impacts of wetland degradation and water diversion in the Murray-Darling Basin on wetland-dependent species such as the Australian painted snipe.

Grazing and the associated trampling of wetland vegetation/nests, nutrient enrichment and disturbance to substrate by livestock may threaten the Australian painted snipe in certain regions, particularly where grazing is concentrated around wetlands during dry seasons (Johnstone and Storr, 1998; Rogers et al., 2005; Jaensch, pers. comm., 2012). Declines in the Kimberley area of Western Australia have been linked with overgrazing and trampling by cattle (Johnstone and Storr, 1998; Birds Australia, 2012).

### Potential threats

A significant potential (future) threat to the Australian painted snipe is climate change. The projections for reduced rainfall and runoff in the Murray-Darling Basin, in conjunction with other known threats (e.g. water diversion for agriculture), are likely to reduce the breeding capacity of the Australian painted snipe in this region. A report from the Commonwealth Scientific Industrial and Research Organisation (CSIRO) Murray-Darling Basin Sustainable Yields Project (CSIRO, 2008) states that 'future mean annual runoff in the Murray-Darling Basin in ~2030 relative to ~1990 will be lower, by 5–10% in the north-east and southern half, and by about 15% in the southernmost parts. Averaged across the entire Murray-Darling Basin, the best estimate or median is a 9% decrease in mean annual runoff'. As the Australian painted snipe is strongly affected by seasonal conditions and appears to depend on the Murray-Darling Basin for breeding, these conditions could have a significant impact on the species.

Predation by feral animals (e.g. nest predation by foxes (*Vulpes vulpes*) or cats (*Felis catus*)) may be a threat to this species but there is no evidence for this. Additional potential threats include coastal port and infrastructure development, and shale oil mining near the species' autumn-winter sites on the central Queensland coast (Houston and Black, pers. comm., 2012). The impact of fire is unknown but may have either a positive or negative influence (Rogers et al., 2005).

The replacement of native wetland vegetation by invasive weeds may also render habitats less suitable or even totally unsuitable for the species (Rogers et al., 2005). For example, the noxious weed species *Parkinsonia aculeata* (a thorny shrub) currently infests over 80 000 ha of wetland habitat in the semi-arid and subhumid tropical area of Australia and is considered likely to spread (Thorpe and Lynch, 2000; in Rogers et al., 2005). This species replaces native vegetation with dense, tall thickets which the Australian painted snipe would be unlikely to use (Rogers et al., 2005).

## **9. Public Consultation**

The nomination was made available for public exhibition and comment for 30 business days. Fifteen responses were received as a result of targeted consultation and one response was received from an interested member of the public. The Committee has had regard to all expert and public comments that were relevant to the survival of the species.

## **10. How judged by the Committee in relation to the criteria of the EPBC Act and Regulations**

The Committee judges that the species is **eligible** for listing as **endangered** under the EPBC Act. The assessment against the criteria is as follows:

**Criterion 1: It has undergone, is suspected to have undergone or is likely to undergo in the immediate future a very severe, severe or substantial reduction in numbers**

Current population

The Australian painted snipe is a cryptic species. It is inconspicuous, erratic and opportunistic in its movements and is notoriously difficult to detect (BirdLife Australia, pers. comm., 2012; Jaensch, pers. comm., 2012). Individuals are 'adept at using low vegetation or small depressions in the ground as cover, and can crouch and turn the body so that any conspicuous plumage markings are concealed' (Rogers et al., 2005). The species has a widespread distribution and it is therefore difficult to conduct comprehensive, targeted surveys across the full range (BirdLife Australia, pers. comm., 2012). Nonetheless, significant survey effort has been undertaken for this species over the past decade, particularly in southern Australia.

In early 2011 the population of the Australian painted snipe was estimated to be between 1000 and 1500, and highly unlikely to exceed 2500 mature individuals (Garnett et al., 2011). This figure is based on the results of Australian painted snipe surveys conducted by BirdLife Australia over eight years (2002–2010) and is likely to include juveniles as well as duplicate sightings (BirdLife Australia, pers. comm., 2011). These surveys included extensive areas of suitable habitat across much of Australia; while some areas have been less well surveyed (e.g. northern parts of the arid zone), the coverage of surveys in south-eastern Australia is considered to be reasonably good (BirdLife Australia, pers. comm., 2011; Black et al., 2010). The number of records in the south-east is likely to be comparable to those in the inland areas, given that Australian painted snipes are primarily summer visitors and drought refugees in this region (BirdLife Australia, pers. comm., 2011).

Frequent heavy rain periods that began in 2010 led to Australia's second highest two-year rainfall period on record (BoM, 2012). Many floodplain wetlands and river systems have been rejuvenated in the Murray-Darling Basin, with obvious benefits for waterbirds (UNSW, 2011). The annual Eastern Australian Waterbird Survey recorded the third-highest number of birds in 2011 since the surveys began in 1983 (UNSW, 2011).

Associated with this rainfall has been an increase in the number of Australian painted snipe sightings (BirdLife Australia, 2012). These records have come from locations including the Pilbara in Western Australia (ABC, 2011a), Rosewood in Queensland (Wildiaries, 2011), the Jerrabomberra Wetlands in the Australian Capital Territory (Canberra Times, 2011; ABC, 2011b), the Macquarie Marshes in New South Wales (Hosking, pers. comm., 2011) and Sydney Olympic Park (NSW Government, 2011). An unusual photo was also taken of 30 Australian painted snipes on a rice paddy at Jerilderie, New South Wales (Bird-O, 2011; Birdlife Australia, 2012). In the two-year period prior to May 2012, there were over 400<sup>1</sup> individual Australian painted snipes recorded across all Australian states and territories (except Tasmania) (BirdLife Australia, 2012).

The Australian painted snipe is known to be highly responsive to seasonal changes and similar 'spikes' in this species' population have been detected during previous high rainfall periods (BirdLife Australia, pers. comm., 2012). Fluctuations in response to wet and dry cycles are to be expected for this species and experts believe that the recent increase in sightings must be considered within the context of long-term population decline (Jaensch, pers. comm., 2012; BirdLife Australia, pers. comm., 2012; Rogers, pers. comm., 2012).

On the basis of this recent evidence, it is likely that the Australian painted snipe population is currently higher than 1000–1500 (BirdLife Australia, pers. comm., 2012; Rogers, pers. comm., 2012). An estimate of 2500 is likely to be more appropriate at this time (BirdLife Australia, pers. comm., 2012).

Reduction in numbers

It is widely accepted that the Australian painted snipe has declined significantly since the 1950s (Lane and Rogers, 2000; Rogers et al., 2005; Garnett et al., 2011; BirdLife Australia, pers. comm., 2011, 2012;

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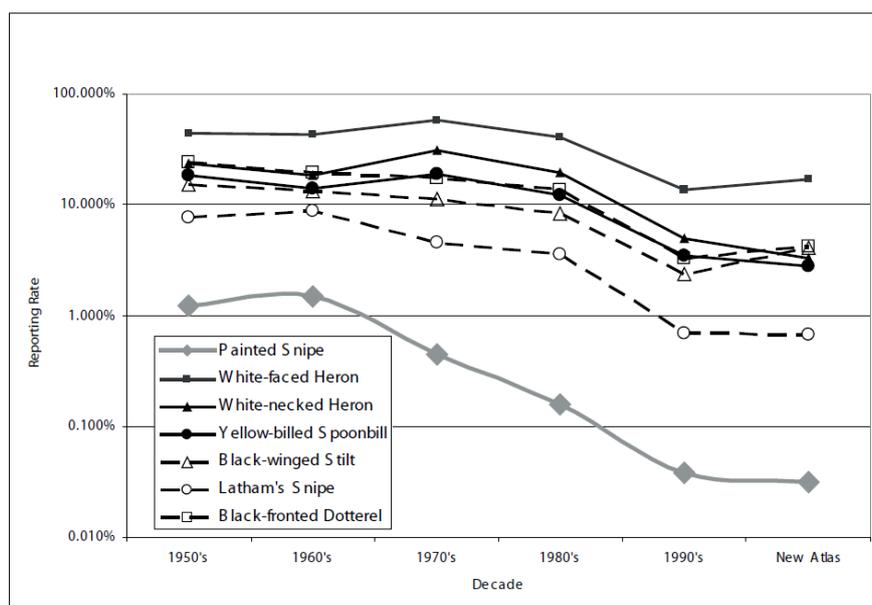
<sup>1</sup> This is the assumed number of individuals, accounting for re-sightings within regions and is an upper estimate (BirdLife Australia, 2012).

Houston and Black, pers. comm., 2012), and – with particular reference to the time frame appropriate for this criterion (three generations = approximately 26 years) – since the mid 1980s it is estimated that the decline has been in excess of 50% (Rogers et al., 2005). However, it is difficult to accurately compare past records for this species as survey methods have changed over time and there is both spatial and temporal variability in the survey effort. Available evidence of a decline is presented below.

Anecdotal records suggest that the Australian painted snipe was not uncommon prior to 1950. The species is reported to have been ‘encountered regularly’, most often in the Riverina of Victoria and New South Wales (Oring et al., 2004). While the species has probably never been abundant (Oring et al., 2004; Jaensch, pers. comm., 2012), it was not thought to be a rare species in the past. Early records include: twelve nests found in one acre at Budgee Swamp (Queensland); 25 eggs taken from at least nine nests in Victoria; eight nests reported at three sites in Victoria (Oring et al., 2004).

Lane and Rogers (2000) undertook a review of the Australian painted snipe using data from the Field and Historical Atlas databases and from the New South Wales Bird Atlassers Inc. database. The reporting rate<sup>2</sup> for the species was calculated by decade for New South Wales and Victoria (together representing 61% of all records). Reporting rates steadily increased from 1900 to the 1950s and then declined consistently, despite a significant increase in the number of Atlas sheets submitted. While there are limitations in the available data, it is possible to infer a significant decline in the number of mature individuals over the three generation period prior to 2000 (Lane and Rogers, 2000).

Prior to recent increases associated with high rainfall, it was reported that ‘there was a general decline in [Australian painted snipe] reporting rates, despite the presence of larger numbers of observers and of greater awareness in the bird-watching community that Australian painted snipe records are worth reporting’ (Rogers et al., 2005). A comparison with other waterbird species (Figure 1) also demonstrated a greater relative decline since the 1950s.



**Figure 1.** Reporting rates of several waterbird species in Australia since the 1950s (Rogers et al., 2005). Note that this information does not include recent increases associated with high rainfall events. ‘New Atlas’ refers to BirdLife Australia data collected since 1998.

<sup>2</sup> The reporting rate is the number of records expressed as a percentage of the total number of [Atlas of Australian Birds] Atlas sheets submitted for an area (Lane and Rogers, 2000).

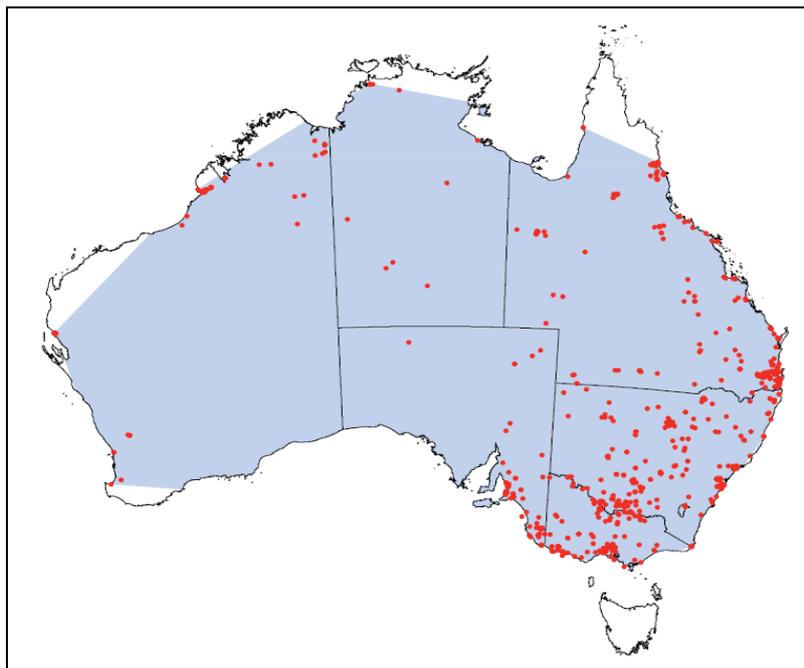
In the 2000 Action Plan for Australian Birds (Garnett and Crowley, 2000), the total number of Australian painted snipes (breeding birds) was estimated to be 5000 and decreasing. In the 2010 Action Plan for Australian Birds (Garnett et al., 2011), the number of individuals was estimated to be 1250 and decreasing. However, the reliability of these estimates is not high, and comparison of these two estimated tallies does not constitute a robust measure of trends. Considering the recent increase in the number of sightings, a figure of 2500 mature individuals is considered to be a reasonable estimate at this time (BirdLife Australia, pers. comm., 2012).

The species is primarily threatened by the loss and degradation of its wetland habitat. A decline in the number of Australian painted snipe sightings in the Murray-Darling Basin has coincided with major changes in water management, including diversion to irrigated agriculture (Kingsford, 2000; Lane and Rogers, 2000). Since European settlement, much of Australia's wetlands have been converted for other uses, particularly in the Murray-Darling Basin. Assessments indicate that approximately 90% of the Gwydir Wetlands, 75% of the wetlands of the Lower Murrumbidgee floodplain, and 40-50% of the Macquarie Marshes have been lost (Keyte, 1994; Kingsford and Thomas, 1995, 2004).

In summary, the Australian painted snipe is a cryptic and inconspicuous species that is not often recorded, though there has been a significant increase in sightings since 2010. The data available on this species' population trend are difficult to interpret because survey methods have changed and survey effort has not been spatially or temporally consistent. However, available scientific assessments report a general decline in reporting rates over the last three generations (26 years). The rate of this decline is considered to exceed 50% over this period (Rogers et al., 2005), and the decline is largely attributed to habitat loss in the Murray-Darling Basin, which is not known to have ceased. Therefore, the species has been demonstrated to have met the relevant elements of Criterion 1 (A2b) to make it **eligible** for listing as **endangered**.

**Criterion 2: Its geographic distribution is precarious for the survival of the species and is very restricted, restricted or limited**

The Australian painted snipe is a widespread species that has been recorded in all Australian states and territories. Its extent of occurrence is estimated to be 7 100 000 km<sup>2</sup> and stable (Figure 2) (Garnett et al., 2011). In 2010 the species' area of occupancy was estimated to be 2000 km<sup>2</sup> and decreasing (Garnett et al., 2011); however, given the exceptional rainfall of 2010–11 (BoM, 2012), it is likely that the current area of occupancy is more than 2000 km<sup>2</sup>. The species' area of occupancy is not therefore considered to be limited for the purposes of this criterion.



**Figure 2.** The distribution of the Australian painted snipe (Garnett et al., 2011).

The Australian painted snipe is threatened primarily by loss and fragmentation of wetland habitat suitable for breeding. Past declines in the species have been associated with this threat, particularly through drainage and diversion of water for agriculture and reservoirs in the Murray-Darling Basin (Garnett et al., 2011). Other known and potential threats to the species include trampling of wetland vegetation by livestock (particularly during dry periods) (Johnstone and Storr, 1998; Rogers et al., 2005), invasive weeds at some sites (Rogers et al., 2005) and the effects of climate change in conjunction with other threats.

As noted under Criterion 1, the Australian painted snipe is known to experience extreme fluctuations in the number of mature individuals in response to wet and dry seasons. There were 335 individuals recorded from 69 sites in 2011 (a wet year), compared to 12 individuals recorded from 6 sites in 2008 (a drought year) (Rogers, pers. comm., 2012). Survey effort and monitoring have been relatively consistent since the Australian painted snipe project (database and monitoring program) was established in 2002 (Rogers, pers. comm., 2012).

The above-average rainfall of the past two years (BoM, 2012) may not persist in the long term (see Section 8, Description of Threats). It is expected that the Murray-Darling Basin will experience reduced average annual runoff by ~2030 (i.e. within three generations) (CSIRO, 2008). Australian painted snipe numbers will potentially decline in response to these conditions, particularly if other threats are not abated. Survival during dry periods is a key 'bottleneck' for the species (Black and Houston, pers. comm., 2012).

As part of current work on Murray-Darling Basin reform, the Australian Government is acquiring water entitlements with the objective of returning more water to the environment. This is expected to benefit waterbird populations. The draft Murray-Darling Basin Plan also sets out environmental objectives for protecting and restoring ecosystems and functions, including those that support lifecycles of nationally listed threatened species or ecological communities (MDBA, 2008). While these initiatives have the potential to reverse wetland loss and degradation to some degree, the benefit of such projects may not be realised immediately or conclusively.

In summary, the Committee recognises that there are several known and potential threats to the species, including wetland loss and degradation and the impacts of climate change, combined with extreme fluctuations in the species' population in response to wet and dry periods. However, the Australian painted snipe is widespread and is not considered to have a limited geographic distribution. Therefore, as the species has not been demonstrated to have met the required elements of Criterion 2, it is **not eligible** for listing in any category under this criterion.

**Criterion 3: The estimated total number of mature individuals is limited to a particular degree; and either**  
**(a) evidence suggests that the number will continue to decline at a particular rate;**  
**or**  
**(b) the number is likely to continue to decline and its geographic distribution is precarious for its survival**

As demonstrated under Criterion 1, there are no robust measures of the total population size of this species, however recent estimates suggest a total population size of about 2500 individuals (BirdLife Australia, pers. comm., 2012). This figure represents a borderline between vulnerable and endangered under this criterion. The Committee considers this estimate to be reasonable, based on the available information, but it is not of high reliability.

The Australian painted snipe is known to experience extreme population fluctuations. It is inferred to have declined substantially prior to 2010 but the number of sightings significantly increased in 2010–2011 (Rogers, pers. comm., 2012) following the second-highest two-year rainfall period ever recorded in Australia (BoM, 2012). Reports from the CSIRO (2008, 2011) indicate that rainfall and runoff in the Murray-Darling Basin, though highly variable, are likely to decrease on average.

The data available on this species' population trend are difficult to interpret because survey methods have changed and survey effort has not been spatially or temporally consistent. However, available scientific assessments report a general decline in reporting rates over the last three generations (26 years). The rate of this decline is considered to exceed 50% over this period (Rogers et al., 2005), and the decline is largely attributed to habitat loss in the Murray-Darling Basin.

The species continues to be threatened by habitat degradation, particularly in the Murray-Darling Basin which is known to be a preferred breeding area for the species. Preservation of wetland habitat suitable for breeding is critical to the species' survival. The Australian Government continues to implement environmental programs and policies in the Murray-Darling Basin (e.g. purchasing water entitlements for the environment); however, the outcome of these initiatives and the long-term benefit for Australian painted snipe cannot be conclusively assessed.

The Committee judges that the estimated total number of mature individuals is low, but does not fall clearly and unambiguously into the range of values qualifying as endangered under this criterion. The species underwent a severe decline in excess of 50% over the last three generations (~26 years) and this long-term trend is likely to continue, particularly due to the threat of habitat loss in the Murray-Darling Basin. The Australian painted snipe is known to experience extreme population fluctuations in response to wet and dry seasons. These factors combine to make the species' geographic distribution precarious for its survival. Therefore, the species has been demonstrated to have met the relevant elements of Criterion 3 – b(v), c(iv) to make it **eligible** for listing as **vulnerable**.

**Criterion 4: The estimated total number of mature individuals is extremely low, very low or low**

Prior to recent increased sightings associated with periods of high rainfall, the most recent published estimate of the Australian painted snipe population was 1250 mature individuals. A revised estimate of 2500 mature individuals is likely to be more appropriate at this time (BirdLife Australia, pers. comm., 2012). Therefore, as the species has not been demonstrated to have met any required element of Criterion 4, it is **not eligible** for listing in any category under this criterion.

**Criterion 5: Probability of extinction in the wild that is at least**

- (a) 50% in the immediate future; or**
- (b) 20% in the near future; or**
- (c) 10% in the medium-term future**

As demonstrated under the above criteria, the Australian painted snipe is highly responsive to seasonal changes and has undergone extreme fluctuations in the number of mature individuals. However, there are no data available to estimate a probability of extinction of the species in the wild over a relevant timeframe. Therefore, as the species has not been demonstrated to have met the required elements of Criterion 5, it is **not eligible** for listing in any category under this criterion.

## **11. Conclusion**

### **Conservation Status**

The Australian painted snipe was nominated for transferring from the vulnerable category to the endangered category of the list of threatened species referred to in section 178 of the EPBC Act.

The Committee accepts that the species has undergone a severe decline in the number of mature individuals over the last three generations (~26 years) in excess of 50%. It recognises that there has been an increase in the number of sightings in 2010–2011 associated with increased rainfall, and that the species is known to respond to seasonal changes. However, scientific assessments nonetheless report a significant long-term decline in the number of mature individuals. This is largely attributed to the loss and degradation of the species' wetland habitat in the Murray-Darling Basin, a threat which is not known to have ceased. Therefore, the species has been demonstrated to have met sufficient elements of Criterion 1 to make it **eligible** for listing as **endangered**, and of Criterion 3 to make it **eligible** for listing as **vulnerable**.

The highest category for which the species is eligible to be listed is **endangered**.

### **Recovery Plan**

There should be a recovery plan for this species because stopping decline and supporting recovery is complex, due to the requirement for: a high level of planning to abate the threats; a high level of cross-jurisdictional co-ordination; a high level of co-ordination between managers; a high level of support by key stakeholders; a high level of prioritisation; and as it involves a highly adaptive management process. It is not known whether existing mechanisms are adequate to address these needs.

## **12. Recommendations**

- (i) The Committee recommends that the list referred to in section 178 of the EPBC Act be amended by **transferring** from the **vulnerable** category to the **endangered** category:

*Rostratula australis*

- (ii) The Committee recommends that there should be a recovery plan for this species.

Threatened Species Scientific Committee  
6 September 2012

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