

## **Peer review of U. S. Fish and Wildlife Service draft status review for the Turquoise Parrot (Neophema pulchella)**

**By Bruce Quin (15<sup>th</sup> September 2016)**

for Dana Hartley; Biologist, Branch of Foreign Species

Ecological Services Program; U.S. Fish and Wildlife Service

### **General**

The draft review has been well researched and has logical conclusions. It has looked thoroughly at the processes that have been identified as probably or potentially contributing to the population fall in the 1880's and whether these degrading processes may still be occurring; and their possible level of impact.

### **Specific Comments**

(note yellow shading is intended to indicate corrected text or text that can be added).

#### Pages 3 & 4 Species Description

Males are distinguished from females by a small red shoulder band or patch and more blue on the face; the red shoulder patch and blue facial colouration of immature males is less extensive than that of adult males.

#### Pages 5 & 6 Habitat/Life History

The species breeds in pairs primarily from August through to January with some nesting noted in February and even April through to May (add Quin pers obs. to reference list).

Four to five eggs, and less rarely 6 or 7 eggs, are laid....(add Quin pers obs. to reference list).

#### Page 6 Current Range/Distribution

In Victoria, the turquoise parrot is mostly confined to the northeast and to east Gippsland (BLI 2016, unpaginated). From January 2010, turquoise parrots, including immature birds, were found in Bunyip State Park (West Gippsland) approximately 100 kilometres east of Melbourne, Victoria. The turquoise parrots appeared from parts unknown in habitat regenerating after the Black Saturday bushfires (February 2009) and some were still present three years later (Quin per obs). The total number of turquoise parrots in Bunyip State Park at that time is not known, but more recent records (2015) indicate a low number of breeding pairs still exist there.

Overall, I believe more intensive surveys are needed to determine population size of the turquoise parrot in the regions of Victoria where it is found.

### Page 8 Conservation Status

The number of Turquoise Parrots currently in the box – ironbark forest near the township of Chiltern (northeast Victoria) appear significantly less than what was there during the late 1980's – early 1990's (Quin pers. obs.).

Two landcare networks in northeast Victoria are working to improve habitat for Turquoise Parrots. The Broken Boosey Conservation Management Network has received \$16,224 to make and install artificial nest hollows for Turquoise Parrots. Also, Ovens Landcare Network received a \$4600 grant that aims to raise awareness of the increasing risk to hollow dependant threatened native species by Indian (Common) Myna presence.

### Page 17 Competition

I strongly suspect that the decreased number of Turquoise Parrots currently in the box – ironbark forest near the township of Chiltern compared to what was there during the late 1980's – early 1990's is a result of decrease in grass abundance; (Quin pers. obs.). However, whether this has occurred as a result of the Millennium drought( a drought that began in 1995 and continued Australia wide until late 2009) or possibly increasing abundances of herbivores (especially kangaroos) or possibly both is not known.

### Page 18 Competition

Back in the late 1980's I got the impression that the level of Fox control in the Chiltern area needed increasing or it needed to more specifically target Turquoise Parrot nesting areas to reduce the level of fox predation on nest contents (the female was usually taken by the Fox and nestlings too if they could be reached).

### Pages 21-23 Climate change

Please see earlier comments for Page 6 Current Range/Distribution and Page 18 Competition. As you have indicated, it is difficult to unravel what response the turquoise parrot population will have to climate change. One point that needs making is that it is not fully understood what stressors/factors were most responsible for the population crash during 1880 to 1920.

### Page 26 Overall Summary

In the face if these stressors it has returned to its former range... There are parts of its historical central southern Victoria range that the turquoise parrot has not returned to (eg Berwick; Dandenong Ranges).