

# Ferruginous Ducks *Aythya nyroca* breeding in the Anzali wetland, coastal Caspian, Iran

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The Ferruginous Duck *Aythya nyroca* breeds mainly in southwestern Asia (east to China and south to Pakistan and India), central and eastern Europe and northern Africa (Callaghan 1999, Vinicombe 2000). Its population has undergone a global large long-term decline, mainly due to habitat loss and hunting and is now classed as Near Threatened (BirdLife International 2017). The global midwinter population is estimated at 40 000–100 000 individuals (Kear 2005). Ferruginous Duck is a common wintering bird in Iran but the majority of its wintering population breeds mainly further east as far as the Aral sea (Scott & Rose 1996). It has been described as a fairly common breeding species in Iran (Mansoori 2006, Scott 2007).

Scott (2007) estimated 150–300 breeding pairs for Iran in the 1970s, but Mansoori (2006) reported for Iran only 2–5 pairs in 2002. The known breeding sites of this species include south of Uromiyeh lake, the Parishan and Shadegan wetlands (Mansoori 2006) and Zarivar (Barati & Attaii 2008). These breeding habitats are exposed to many ecological problems, such as water shortage or anthropogenic disturbance and these threats have led to a decline in the ecological condition of these areas and consequently worse conditions for most of the breeding waterfowl including the Ferruginous Duck (Barati & Attaii 2008). There are also scattered records of breeding Ferruginous Ducks in different parts of Iran. For example, a pair with young was reported in Zarrin-shar sewage ponds, Isfahan



Plate 1. Ferruginous Duck *Aythya nyroca* chicks, Anzali wetland, 13 June 2014. © A Ashoori

province, in April 2010 (Omidi 2010), more than 15 pairs of the species were observed in Zarivar in the 2016 breeding season (SN Hossieni pers obs) and a pair with chicks was recorded in Kashaf roud, Khorasan-e Razavi province in the 2016 breeding season (A Khani pers obs).

The wetlands of the south Caspian sea host a wintering population of Ferruginous Ducks but there has been no previous breeding record there (Ashoori & Abdoos 2013). The present breeding record is from Anzali wetland (19 300 ha) in Gilan province. Since 1975 Anzali wetland has been registered in the Ramsar Convention as a wetland of international importance.

On 13 June 2014, 10 Ferruginous Duck chicks (3–5 days old) with a female were observed in the western Anzali wetland (37° 30' N, 49° 17' E, Plate 1). Three other mature individuals were seen 200 m from the first observation. In the breeding season, where the chicks were seen, I observed four adult Ferruginous Ducks in 2014 and six and eight adults in 2015 and 2016 respectfully. Unauthorized fishing activities, underwater nets and nets from previous years left in the water are a serious threat to adults and chicks. Management activities *eg* strict conservation and supervision and reducing fishing activity in suitable parts of breeding habitat are needed.

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