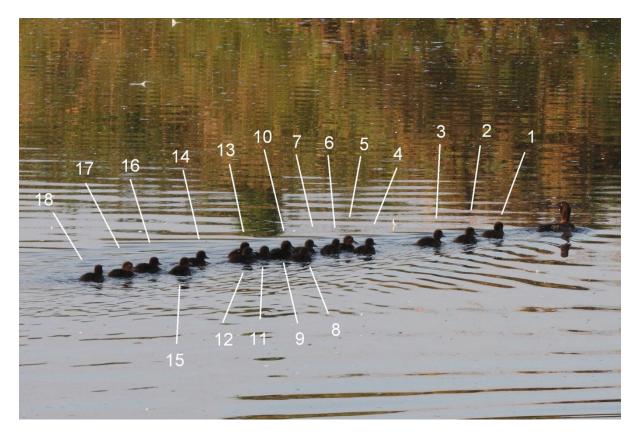
## Tufted Duck Aythya fuligula -a case of intraspecific brood parasitism?

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In the autumn of 2010 several Tufted Ducks *Aythya fuligula* were recorded at a two hectare pond in private property on the north coast of Dublin City. As this was the first record for the site permission was obtained from the land owner to monitor the birds. On various occasions in 2011 and 2012 birds were recorded occasionally but nesting was never suspected. In spring and early summer 2013 five males and four females were present regularly and copulation was observed in mid-June. It soon became evident from the birds behaviour that nest prospecting or egg-laying was taking place at a dense patch of aquatic vegetation at one side of the pond. At the time it did not seem out of place that more than one female loitered in this particular area. More frequent observations were made in July and on the 17th a female with 18 newly hatched chicks were recorded at the suspected nest site. Over the following days and weeks all chicks remained close to this one female even when other females occasionally visited the pond.



**Plate 142**. Female Tufted Duck with 18 newly hatched duckings, Dublin, 17 July 2013 (Tom Cooney).

Eighteen chicks from one nest is an exceptionally high number as Tufted Ducks normally lay 8-11 eggs (Robinson 2015). It is entirely possible, though not likely that this female laid all

18 eggs. In itself this would be would be a noteworthy event. However the presence of more than one female close to the nest site at the time when egg-laying was likely to have taken place provides a different explanation. Ducks are weak defenders of the area in the immediate vicinity of their nests during the laying period and this it would appear provides an ideal opportunity for parasitic females to lay their eggs (Ehrlich *et al.* 1994). This behaviour, known as intraspecific brood parasitism is not uncommon in wildfowl species particularly diving ducks (Blums *et al.* 2002). It also appears to occur disproportionately in species with precocial young (Dugger & Blums 2001). There are no benefits for the host females and it is likely that an increased clutch size could potentially attract more predators thereby reducing breeding success. Only five of the 18 chicks observed in July 2013 survived to fledging.

Intraspecific brood parasitism is strongly suspected to have taken place at this site in 2013.

## References

- Blums, P., Clark, R.G. and Mednis, A. 2002. Patterns of reproductive effort and success in birds: path analyses of long-term data from European ducks. *Journal of Animal Ecology*, 71 : 280-295.
- Dugger D. B. and Blums P. 2001. Effect of conspecific brood parasitism on host fitness for Tufted Duck and Common Pochard. *Auk* 118: 717–726.
- Ehrlich, P.R., Dobkin, D.S., Wheye, D. and Pimm, S.L. 1994. *The Birdwatcher's Handbook*. Oxford University Press.
- Robinson, R.A. 2015. BirdFacts: profiles of birds occurring in Britain & Ireland (BTO Research Report 407). BTO, Thetford (http://www.bto.org/birdfacts, Accessed on 22/September/2015)