

Piebald Common Frogs *Rana temporaria*

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The coloration and markings of the common frog *Rana temporaria* are highly variable. Specimens with unusual coloration have long attracted attention with observations going back to as early as 1891 (Webb, 1975). Here we report on several partially amelanistic or piebald frogs (Figs. 1 & 2) observed in a garden pond in Trimley St. Martin, Suffolk, England. Piebaldism is a partial loss of pigmentation resulting in areas or patches of white skin within otherwise normal coloration. One of the frogs, photographed in 2006, also had yellow blotches (Fig. 2). Curiously, this frog also had one normally coloured eye and one pink eye. It is impossible to be sure whether the latter was due to damage from injury, such as attack by a predator, or whether it was a result of the piebald condition.

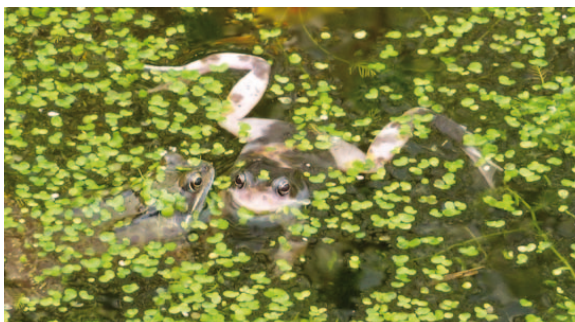


Figure 1. Piebald common frog, March 2020



Figure 2. Piebald common frog, March 2006

Piebald frogs have been seen in this pond in 2001 (n = 1), 2006 (n = 1, observed spawning) and 2020 (n = 2) within a relatively large population (for a garden pond) with spawn clump counts of approximately 30 to 100 per year. The recurrence of this aberrant coloration at the same location suggests a genetic basis rather than a result of trauma during development. Unusual coloration in common frogs may be

more apparent in garden populations than in the countryside due to genetic drift caused by population fragmentation within developed areas (Beebee, 1997). In this case the pond is in a village bordered to the north-east by a major road (the A14), which is presumably a significant barrier to amphibian migration.

Piebald appears to be a rare colour variation in the common frog. Nicholson (1997) collated responses to two press releases issued by Cornwall Wildlife Trust in 1994 and 1995, regarding orange or albino common frogs and requesting reports of other unusually coloured specimens (Mark Nicholson, pers. comm.). Responses covering 124 different locations in southern Britain were regarded as reports of either albino or partial albino frogs. In fact most of these were probably xanthochromic, as described by Allain and Goodman (2017). Presumably the orange/red eyes of some xanthochromic frogs has led to them being labelled as albino. Three of the sites (2.4 %) reported 'variegated' frogs and these may have been piebald specimens. Records of piebaldism in other amphibians are also scarce (García-Padrón & Bosch, 2019) although in Britain Sewell (2007/2008) describes a possible case of piebaldism in the great crested newt *Triturus cristatus*.

ACKNOWLEDGEMENTS

We are grateful to Mark Nicholson and Trevor Beebee for discussion. We thank Sue Biddle for Figure 1.

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Accepted: 21 April 2020