## "BREWER'S DUCK" - A Hybrid with a History

## By Jörn Lehmhus

The duck seen below, labelled as a hybrid "Mallard x Teal" in the publication "Bastaards" in Aviculture Europe, December 2008 is not this hybrid combination, but in fact a hybrid of Mallard and Gadwall, or a so-called "Brewer's Duck".



The museum specimen from the National Museum of Natural History Naturalis, Leiden (NL) from the previous issue, labelled as Mallard x Teal.

The head, breast pattern and wing pattern, especially the coloration and pattern of the speculum greater and the median coverts identify it as such a hybrid. This cross is not very common in the wild but still occurs regularly. In the right is another example from Germany with a different head pattern but otherwise quite similar.

## Right:

Hybrid Mallard x Gadwall ("Brewer's Duck") wintering at the same place in Berlin-Reinickendorf since at least 4 years now.





Left: Another photo of the "Brewer's Duck"

The hybrid's characteristics are unique in some details, like the head pattern or the speculum, but several other details are intermediate between the parent species.

The leg colour is orange with dusky webs, but the orange is slightly more yellow than in Mallard and a bit brighter than in Gadwall. The breast

pattern is variable, but in general a combination of the scaly breast pattern of the Gadwall on a maroon Mallard breast. Towards the belly the scaling changes towards a coarser more spotted pattern. The Mallard tail locks are not expressed in the hybrid, instead they are replaced by

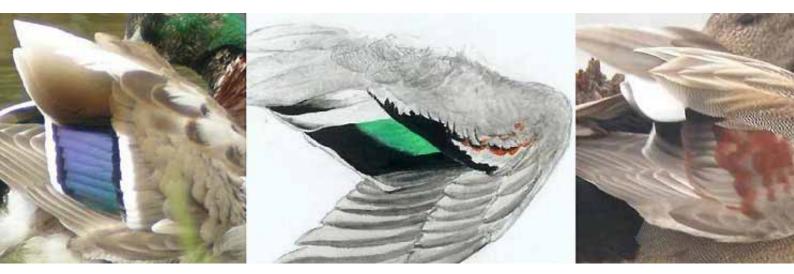
straight black feathers. The tertials are often more Gadwall-like, but there are also individuals with more Mallard-like tertials. The body often appears very uniformly grey at a distance, making individuals stand out in a group of Mallards.

The size of this hybrid intermediate to the parent species, which themselves differ not much in size when compared in the field. Therefore in the field this hybrid appears about mallard-sized. This helps distinguish this hybrid from superficially similar hybrid combinations like some Teal hybrids

## The Berlin-Reinickendorf hybrid surrounded by its parent species for comparison purposes.

The iridescent area in the speculum of the hybrid is green or blue-green and there are some mainly white inner secondaries. At least the tips of the greater coverts are black, and the tips of the median coverts may be either reddish brown or black. In comparison with the parent species the intermediate aspects of the speculum are well visible.





The pattern of the speculum of Mallard and Gadwall and their hybrid, the drawing of the hybrid wing pattern has been done after the wings of 3 different "Brewer's ducks" shot at different locations in the USA.



The speculum of the museum specimen from the National Museum of Natural History Naturalis, Leiden (NL). Due to the angle of the light the green iridescent patch is not visible, making the speculum appear all black.

This hybrid gives a fairly uniform greyish impression concerning the body, but has an extremely variable head pattern. In most cases "Brewer's Duck" shows a greenish or purple iridescent patch on the head. In most cases these birds also exhibit a reddish brown or ochre cheek patch of varying size which may be divided by a more or less complete dark line, as seen in the Essex hybrid and in the Naturalis specimen. This cheek patch may have a fine black spotting, as is seen in the hybrid from Chemnitz, Germany. The crown is often maroon, but can also be blackish. In most birds of this combination the beak is partly black and partly orange or yellow.



Head patterns of a hybrid Mallard x Gadwall from Essex, England, the museum specimen from the National Museum of Natural History Naturalis, Leiden (NL) and the hybrid from Berlin-Reinickendorf (D).

But how and why this hybrid is associated with a specific name, "Brewer's duck"?

At the beginning of the 19<sup>th</sup> century the famous American ornithologist John James Audubon described a new species of dabbling duck after a single male shot on Lake Barataria in Louisiana in February 1822. He named this duck after a friend, the ornithologist Thomas M. Brewer from Boston. No other individuals of the species were seen at that time, and despite his efforts Audubon did not succeed in finding another one.

Audubon himself said in his description: ".... In form and proportions this bird is very nearly allied to the Mallard, from which it differs in having the bill considerably narrower, in wanting the recurved feathers of the tail, in having the feet dull yellow in place of orange-red, the speculum more green and duller, without the white bands of that bird, and in the large patch of light red on the side of the head. It may possibly be an accidental variety, or a hybrid between that bird and some other species, perhaps the Gadwall, to which also it bears a great resemblance. ...."

This shows Audubon had already his suspicions about the bird's ancestry when he described it as a species in 1843. His drawing of the specimen shows a bird that is in several traits intermediate between the two parent species. Later it became clear that Audubon's suspicions were correct and that "Brewer's Duck" was indeed a hybrid of Mallard and Gadwall. A hundred years after Audubon's description Kortright (1943) says in "Ducks, Geese and Swans of North America" that "Brewers duck" is now known to be a hybrid between Gadwall and Mallard.

However, neither Audubon nor Kortright knew of the enormous variability this hybrid shows, especially in its head pattern. Due to this variability this hybrid is not always straightforward to identify, but resembles other hybrid combinations like Gadwall x Teal and Mallard x Teal. The birds size and wing pattern are helpful for reaching the correct conclusion, as mentioned in the beginning.



Two extremes in head pattern: A hybrid from Chemnitz, Germany, and the hybrid from Essex, England, at a different angle of light and therefore with very different looking head pattern than in the previous photo of that bird.

