## Wyre Forest Study Group

## The Oak Jewel Beetle Agrilus (Anambus) biguttatus (Fabricius, 1777)

(Coleoptera) (often referred to as Agrilus pannonicus) in Wyre Forest

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The *Buprestid* 'jewel beetles' are some of most brightly coloured of the beetles with a metallic colouration in greens, blues and reds. Adult beetles are bullet-shaped (wider at the head end) with large eyes and well adapted for their lifestyle as wood boring insects in the larvae stages. The adults have short antennae and fly rapidly, if somewhat erratically, whist searching for freshly exposed or damaged wood. There are some 12 native species in Britain plus a few introductions. Most do little damage to trees and all species are normally rare.

Recently one species Agrilus pannonicus has become more common due to the amount of oak dieback occurring in many of our forests including Wyre. Oak dieback or oak decline is a bacterial disease from *Phytophera species* that cause sudden canopy dieback and possible death of the tree. The Agrilus beetle cannot attack healthy trees but can infest these weakened trees attracted by weeping sap runs or dark exudates on the trunk of infected oaks. Adult beetles lay their eggs within the bark and the larvae tunnel into the tree damaging the cambium layer. After about two years feeding the emerging adult beetles leave a characteristic 'D-shaped' exit hole. (Hickin 1975)

Agrilus pannonicus was as recently as 1987 listed in the British Red Data Book as 'vulnerable' and under some threat of extinction at the time. Since the Great Storm of October 1987 when many oak were damaged, the beetle took advantage of a new supply of suitable stressed or dead oak trees. (Denman 2010). Since 1990 'oak decline' for various reasons has kept up the supply of freshly dead, dying or stressed oak trees and the beetle has taken the opportunity to breed successfully. It is now much more common in some wooded areas particularly in the south east of England. In Wyre Forest we have a scattering of oaks trees infected by oak decline and most show beetle attack also. Apart from infected oak trees freshly cut oak stumps in May-June appear to be a good place to look for this attractive beetle. It is about 12mm long and a metallic green with white marks on the sides.

But remember that the beetle does not kill healthy oak trees, but it can perhaps add to the trees overall decline once infected by *Phytophera* pathogen. In spite of this oaks can, and do, recover from the disease and beetle attacks. In time the beetle may resume its former status and become a rare species again.

Another buprestid beetle that has been recorded for Wyre is *Agrilus viridis* (L.) - Nationally Scarce A. The adult is similar to *A. pannonicus* with a bronze-green body but lacks the white marking on the side. The larvae feed in dying boughs of *Salix spp.*, especially recently split poles and it may occur in oak. This is one to look out for as it has not been reported recently. (Alexander 2002)

## REFERENCES

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