



Bristol Naturalists' Society

Registered Charity No. 235494

Wildlife News: Week 44 – November 04th 2007

Weather.

It has been a much warmer week, but October's average was 14.9C, 0.8C above the long term average of 14.1C. The week average was back to 14.7, two degrees warmer than week 43, so the year to date figure has stuck at 15.5C, and the last twelve months is still 14.6, but has begun to rise as the start of November last year was cold.

It has been a dry week- just 4mm fell on Monday, and the first two months of autumn have had just 117mm compared with a long term average of 174mm. Twelve month rainfall is down to 1027mm, and annual rainfall is only 150mm above average.

Autumn Colour

The absence of storms has given a long period of steadily finer colour. Red Oaks at present are magnificent as are Beeches, though the first Beech is bare. Some Sycamores are bare- but have turned brown because of the masses of seeds hanging from the twigs; they have had no storms to send them twirling to the ground. In general Autumn is two weeks earlier than average, and the 23 tree species already bare have had a shorter growing period than average by 23 days. The date they have gone bare is 14 days ahead of average.

Flowers.

The cool summer and dry autumn has helped to increase the average flowering period of all species. The average of 53 common species is at present 15.6 weeks, the highest I have recorded for these species since 2001. The average flowering period for them for a full year is 14.3 weeks. During this week I have found 70 species still in flower, all within the city of Bristol. I hope to establish last flowering dates to complement the first flowering dates I have compiled. On the Downs this week there were 33 species still in flower, which is the same as the average for this week.

Severn Estuary, part 3

I have prepared a two side summary of the Sustainable Development Commission report on the Severn Barrage, which I can send to anyone who wants it. This week **The Tidal Regime**. Essentially if the barrage were built there would still be a tidal system above it, but the tidal range would be halved, from twelve metres maximum at Avonmouth to five metres. The tide would range from present half tide to about a metre below full tide. Present low tide would never occur again. So we would never see the Avon full to the brim again, and there would never be a tide again that went over the weir at Netham. Equally we would never have the acres of mud that we are used to on the Avon. There would be a huge loss of intertidal mud and sand flats in the Estuary. This might amount to 14,428ha at spring tides and 5,842ha at neaps. What the impact of these changes would be is not easy to quantify. There would be a loss of an estimated 540ha of existing saltmarsh, as upper levels would never be covered by the tide, and would become ordinary meadow. But the saltmarsh would migrate down towards the new tide level. However

wave erosion of mud banks might worsen, even though the biggest storm waves would be smaller, because the changed tide regime would mean wave attack at the same tide level would last much longer. The decrease in tidal range would mean that the whole basin became less saline, though this would depend upon the river flow into the system, but at times of strong river flow in spring the whole basin might become almost fresh. This would obviously alter all the plant and marine life in it. Another unknown is how much of the estimated 30m tons of suspended mud would settle, and where. The consequences for navigation will be examined next week, but it also might mean mud replacing sand on Weston beach, the upper end of which would of course never be cleaned by the sea. If the suspended mud were deposited much more light would penetrate the water, which could lead to a huge algal bloom, and eutrophication of the whole basin, turning it into a green soup. This is what happened to the enclosed Cardiff bay, and they have been spending £10m a year pumping oxygen into it to prevent this. Another effect would be an increase in pollution. Heavy metal levels might double, and the level of coliforms from sewage cannot be estimated. In other words swimming might become impossible. Perhaps the point to emphasize here is the word MIGHT. Almost nothing adequate is known about the impact of the barrage on the upstream environment. The risks are huge.

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