A walk on the wild side

Cholderton Estate

Amphibians & Dew Ponds

By the middle of February, I was becoming concerned by the absence of toads and frogs from the drive leading to the house. Normally, from the first week of February, I have to move them to the side to prevent them being squashed by vehicles. This coincides with my late night visits to the lambing shed; from 9 – 10 pm. Chats with other observers revealed that they too had seen none. Visions of frog plague or glyphosphate poisoning prevailed in my mind. Thankfully, by the 21st February, there was a change to a milder, damper spell and the toads moved. On that evening, I collected 94 over a short stretch of track and our pond began to fill with croaking toads and frogs. Though I saw few frogs on the drive, there were soon over 150 bunches of spawn floating in the weeds on the edge of the pond.

Toads were still making their way to the pond in the first week of March. There were some huge females, nearly as big as my hand, carrying their husbands on their backs like some rucksack on the shoulders of a cross country hiker.

Male toads sit high, with bottom down and front legs straight which seems to help them locate females as they crawl past in the dark. Whether they do this by scent, sound, or sight, I do not know. Whilst the males sit up, the females crouch and do not generally hang around but continue onwards to the water. There is an evident homing instinct; they know not to spawn in any puddle but to make their way to the place where they were born.

Ponds used to be a feature on every farm, but sadly far too many have been filled in or allowed to silt up. Here, on the high downs, we lack permanent water features and the shortage of water has been an agricultural issue from the earliest times.

To overcome this, dew or mist ponds were dug in locations where fog would likely hang, or drift. This could be on the tops of hills or in the bottoms of the steep valleys that surround the high ground. These ponds were located well above ground water level and were lined with layers of clay, straw and chalk rubble. They have an average water diameter of 60ft but the clayed area would extend to about 2 and a half times the area of the pond. This enabled rainfall to run down the gently sloping sides, this being the principle derivation of water for the pond, rather than the mist and dew.

Such a pond could hold 100,000 gallons of water, enough to keep a flock of 190 sheep for a year; despite losses from evaporation. Today, nearly all have become no more than mysterious, dry, oval depressions, which have held no water for decades.

Dew ponds, being ephemeral, provided ideal breeding conditions for amphibians. They hold no fish and if they became dry in a hot summer, would have retained water long enough for the juveniles to mature to a stage where they could move from water to the dry land, which is actually their principle domain. Some dew ponds date back to the Bronze Age which emphasises their contribution to the natural history of the downs for millennia.

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Some years ago, I repaired an old Victorian concrete pond of about a third of an acre. This was achieved by lining the sloping sides and bottom with sand and then installing a butyl liner. No fish have been introduced and today it is home to Great Crested Newts, Frogs and a great number of Toads. The edges have been planted with a variety of water plants. In the summer, Swallows and House Martins skim over its surface, Dragonflies, some huge and lapis lazuli blue, hover and soar in play fights; others like shining emeralds dart between the nearby trees. All this, for hunting flies and holding territory in their watery kingdom.

Management in the area surrounding the pond is as important as the pond itself. Here, the natural grasses are only cut once a year, and then by hand, in the depths of winter. A few walks are maintained more frequently, but the purpose is to provide a home for the thousands of infant amphibians that emerge from the pond every year. Here in the rough grasses, they can find shelter and food and are able to spread out far and wide when they are strong enough to do so.

This pond has become a jewel in the centre of the farm and I can guarantee that anyone who takes similar steps will experience great pleasure in their works as well as providing a vital reserve for amphibians whose numbers have been decimated by industrial farming practices.

Henry Edmunds FRES
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