

In part five of our series in conjunction with the Irish Ramsar Wetlands Committee, **Catherine Keena** from Teagasc looks at the wetlands which are most undervalued – wet patches on farms

Wet, marshy areas and wet grassland are not the most productive areas on farms – measured in terms of dry matter production. However, they deliver public goods such as biodiversity, landscape, regulation of water, nutrients and organic matter. Appreciation of such public goods is growing. However, when asked to identify areas of high nature value, farmers mention trees, scrub, rivers and hedgerows. Few consider wet patches.

Species-rich grassland is more bio-diverse and supports more invertebrates than monocultures of ryegrass or barley. Bees and butterflies depend on flowering plants. Habitats with water hold additional flora and fauna, including many invertebrates which are the base of the food chain for birds, bats and mammals.

FLORA OF WET PATCHES

Marsh is found near rivers, lakes and where soils are waterlogged, with the water table continuously close to ground level. Unlike swamps, standing water is not characteristic of marsh, except during wet periods or in winter.

Marsh is rich in flora, with rushes, sedges, grasses, mosses, liverworts and broadleaved herbs such as meadowsweet, wild angelica, ragged robin, bogbean and yellow iris. Sedges and grasses comprise less than 50% of the vegetation. Marsh grades into wet grassland, which has more grasses and less broad-leaved herbs. Wet



The common carder bumblebee. Photo by John Breen.



Photo by Eddie Dunne.



A curlew. Photo by BirdWatch Ireland.



Photo by Catherine Keena.



A frosted orange moth. Photo by Philip Strickland.



Photo by Catherine Keena.



Photo by Catherine Keena.

grassland occurs on soils that are poorly-drained or subject to seasonal flooding. The vegetation is characteristic of waterlogging, dominated by rushes and sedges in addition to grasses and a high proportion of broad-leaved herbs such as creeping buttercup, silverweed, water mint, marsh bedstraw and lady's smock.

ASSOCIATED FAUNA

Lady's smock is often enveloped in the foam produced by frog-hopper nymphs, the "cuckoo-spit" once thought to have been hawked up by the newly-arrived cuckoo. It is known as the cuckoo-flower, flowering when the cuckoo comes.

Of the 34 species of butterflies in Ireland, the ringlet, marsh fritillary and orange-tip butterflies are found in wet meadows and marshes. Lady's smock is the major food plant for the caterpillar of the orange-tip butterfly.

Ragged robin is a source of nectar for several butterflies.

Bee populations in Ireland are at crisis levels. There are 102 bee species, all with different requirements. For example, two species that nest in balls of moss on the surface of wet grassland are the common carder bumblebee and the moss carder bumblebee.

The frosted orange moth lives in marshy areas. Frogs live and hunt here. Wet grassland holds a greater diversity of invertebrates than improved pasture. They are important for breeding waders and other birds. Lapwing chicks feed on small beetles, flies and insect larvae. Adult snipe and lapwing probe soft wet grassland for earthworms and leatherjackets with their long bills.

DECLINE IN NUMBERS OF BREEDING WADERS

Breeding waders are a group of birds that have suffered the great-

est decline in numbers. This includes the curlew, dunlin, golden plover, redshank, lapwing and snipe. The reason is the loss of semi-improved and wet grassland, turf-cutting, afforestation of uplands, windfarms and predation.

Once common throughout Ireland, recent findings of the 2007 to 2011 *Bird Atlas* show that curlew have disappeared from over 70% of their former range. Indications are that curlew may be on the verge of extinction in Ireland. Fragmentation of their habitat has also made them more vulnerable to predation, particularly by foxes.

From April to June, they are quite obvious, displaying over farmland, making their distinctive bubbling call as they circle their territories.

These native breeding curlew are distinct from the wintering curlew, seen frequently at the coast from August to April and re-

turn to Scotland and Scandinavia to breed in spring.

MANAGEMENT OF WET PATCHES

Light grazing of marshy areas with cattle in summer is ideal. Control rushes by topping in late summer or autumn. Cut hay after flowering in late summer. Restrict stocking during the breeding season if used by ground-nesting birds. It is important not to abandon the grazing of marshy areas or wet grassland. Abandonment leads to rank vegetation with a reduced number of aggressive species, making the habitat unsuitable for breeding birds. **CL**

Proposals for GLAS list curlew as a bird to be targeted, meaning farms with curlew could be eligible for priority access to the scheme. Email sightings of breeding curlew to adonaghy@birdwatchireland.ie or call 074-912-9905.

WORDS OF LIFE

For by grace are ye saved through faith; and that not of yourselves: it is the gift of God: not of works, lest any man should boast.

Ephesians ch. 2 v 8 & 9.