Exploring Rural Ecosystem Services: Arable land

Ecosystem Services are the contributions that Natural Capital provides for human wellbeing and quality of life.

Read more about Natural Capital and Ecosystem Services on the Thriving Natural Capital Website.

How to enhance your ecosystem services supplied by arable land?

Hedges: Introducing and/or enhancing hedges on your farm can have great impact on the ecosystem services on your land. Within an arable setting, hedges can help reduce pests by providing habitats for predatory species; help reduce soil erosion and surface runoff from your land. They can also reduce wind speeds and protect your crop. Habitat corridors can be created with hedgerows, helping pollinating species on your farm. In addition, hedges can be used to sequestrate carbon and help air purification.

Wild bird seed: Introducing a part of your land to wild bird seed can provide crucial food and cover for bird species over winter months. Choosing a more diverse wild bird seed mix to include cereals and legumes, and flowering crops, will increase the attractiveness of the plot to pollinators as well as bird species. By introducing wild bird seed you can increase the potential for recreation with bird watchers, which could potentially offer tourism revenue for your business.

Overwinter stubble: Leaving areas of crop stubble on your land over winter can have great benefit to wildlife. The stubble provides food and shelter for a range of species. In addition, the stubble allows habitat corridors to exist from field margins, hedgerows, ponds and trees. Leaving the stubble in situ over winter can reduce soil run off, which improves soil health and the local water quality.

Grass and water margins: Introducing grass and water margins on your land helps ensure that cross compliance is upheld, however, many other benefits are provided by these habitats. Grass margins can help reduce soil erosion by offering buffers from water runoff eroding your soil, reducing velocity of water and catching soil on farm, preventing the soil and diffuse pollution from entering waterbodies and reducing water quality. Grass and water margins additionally provide valuable habitat corridors, allowing wildlife to thrive, with the potential to attract predatory species to help alleviate pest species on farm.
Benefits to your business from enhancing natural capital

- **£** Source of grant funding
- **Tractor** Defined field boundaries
- **Irrigation** Diverse landscape
- **Plant** Improved soil structure
- **Leaf** Aid in complying with regulation
- **Sun** Shelter from adverse weather conditions

Where to find more information

Listen to the 'Exploring Rural Ecosystem Services' Podcast series and the Arable episode with Mary-Jane Lawrie from SAC Consulting.

Mary-Jane Lawrie is an Agricultural Consultant at SAC Consulting and works in all aspects of agricultural consultancy, including financial and technical reviews, options appraisals, feasibility studies, budgeting, with particular interest in climate change, carbon foot printing, nutrient budgeting, habitat management and conservation, environmental advice and soil management.

The RSPB has produced key information on wild bird seed mixtures and information about introducing over-winter stubbles.

The Farm Advisory Service has created guidance documents, factsheets, podcasts and video resources on How to provide for birds on arable farms; Habitats for beneficial insects; Managing Arable land for Biodiversity; and Water management for arable farms.

Visit Farming Water Scotland to read more about grass and water margins and how to prevent diffuse pollution on your farm, ensuring that you are complying with regulation and cross compliance.

Visit Hedgelink to find out more about hedgerows. Visit their 'Hedge Hub' to learn more about their importance within arable land and for signpost to further resources.

Read ‘How to establish, manage, and rejuvenate hedgerows’ in Farmers Weekly.