FARMING AND CROFTING FOR WILDLIFE

Scrape creation for waders

Above: Declining farmland birds, such as lapwings, redshanks and snipe, will benefit from scrape creation. Note the muddy edges on this scrape.

Scrapes are shallow depressions with gently sloping edges, which seasonally hold water. They create obvious in-field wet features that are attractive to wildlife.

They can be created on areas of damp grassland, upland in-bye land and on arable reversion on floodplains.

BENEFITS FOR WILDLIFE

Scrapes provide insect-rich areas where birds can feed
They support high densities of non-biting midge larvae, aquatic insects and around their edges, earthworms. These are important food for wading birds like lapwings and redshanks, and for wader chicks. Other farmland birds like tree sparrows will also benefit.

Scrapes should hold water from March to late June, though water levels can recede as the spring progresses. They may dry out by late summer/autumn.

GUIDELINES OVERLEAF

KEY POINTS

- **Scrapes can be a simple way of providing wet features in a field.**
- **Lots of muddy edges are important – edges should be gently sloping.**
- **Locate scrapes away from boundary features and overhead wires.**
- **Avoid floristically diverse sites or those with archaeological interest.**

Figure 1. Scrape creation utilising existing land drain – cross-section view

Figure 2. Scrape creation utilising existing land drain – plan view

Illustrations based on original diagrams by Sarah Dullage.

See also the RSPB Scotland advisory sheets on:

- Lapwing
- Redshank
- Snipe
- Managing grassland for waders
- Managing water levels to benefit birds.

For answers to all of your farm wildlife enquiries, visit **www.farmwildlife.info**

RSPB Scotland is part of the RSPB, the UK charity that speaks out for birds and wildlife, tackling the problems that threaten our environment. Nature is amazing – help us keep it that way.

Front cover image by Scrape (Andrew Gouldstone)
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775-0140-09-10

You can get further information on this and other ways of managing your farm for wildlife from:

RSPB
The Advisory Manager,
RSPB Scotland, Dunedin House,
25 Ravelston Terrace, Edinburgh
EH4 3TP Tel: 0131 311 6500

SAC
Supporting the land-based industries for over a century
SAC (Scottish Agricultural College), King's Buildings, West Mains Road, Edinburgh EH9 3JG
Tel: 0131 535 4000

NFU Scotland
NFU Scotland, Head Office, Rural Centre - West Mains, Ingliston, Midlothian EH28 8LT Tel: 0131 472 4000

Scottish Natural Heritage
All of nature for all of Scotland
Scottish Natural Heritage,
Great Glen House, Leachkin Road,
Inverness, IV3 8NW
Tel: 01463 725000

Location

The location of scrapes will depend on many factors, including:

- Soil type
- The presence of existing damp areas in a field
- Existing land drain locations
- Field boundaries and other features such as overhead wires
- Existing flora and fauna, SSSI designations and archaeological features

Impermeable soils will be best suited to scrape creation. If surface soils are impermeable, for example clays and silts, ensure scrape depth does not break through to permeable soils below. On permeable soils, for example peat, if the water table in the soil is high, creating scrapes will 'break through' to the water, creating obvious in field wet features. Scrapes are also useful if raising the water table within the field itself is not possible, perhaps because it would cause impacts on a neighbour's land. When locating scrapes all of the above factors need to be considered. Locate scrapes at least 100 m from field boundaries such as hedges and woodland, and away from overhead lines, to help increase their attractiveness to ground-nesting wader species. Fields over 3 ha are best. Avoid areas with apparent existing floristic diversity – these may already be good wildlife habitats – and also take advice about features of landscape, historical or archaeological importance, as scrapes may not be appropriate in some situations. Scrapes can be created on slight slopes. See notes under 'Spoil'.

Lapwing (rspb-images.com)

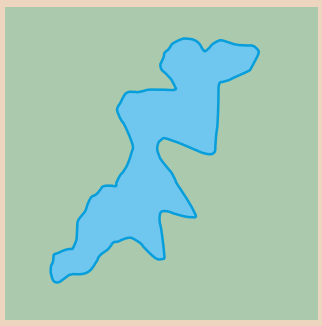
Scrape depth, shape and size

Scrapes need to be shallow, though not with a uniform depth across the whole area. Deeper areas towards the middle of the scrape should be no more than c45 cm. These deeper areas may stay damp even in drier periods. The most important part of the scrape is the edge, and the more edge there is on a scrape the greater the feeding area it offers. Edges should be kept gently sloping and very shallow. A scrape can be any shape, although an irregular outline creates a much greater edge effect than a regular one, so a linear scrape that winds across the field is better than a 'round' scrape (see diagrams right). However, on some sites a linear scrape may be unpractical and a round scrape can be used instead.

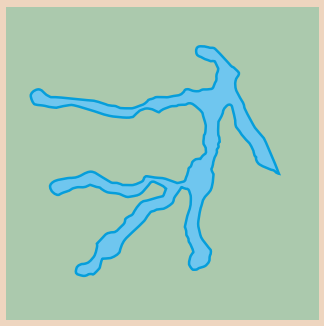
Linear scrape (Andrew Gouldstone)

Picture 1: Linear scrape with muddy edges

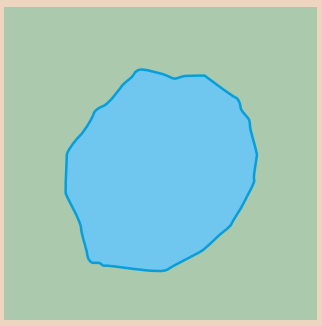
Scrapes can vary in size depending on the field size and the location. The suggested minimum size of a scrape is approximately 20 m^2. Three of these per hectare would represent a good level of habitat provision.



More edge effect



More edge effect



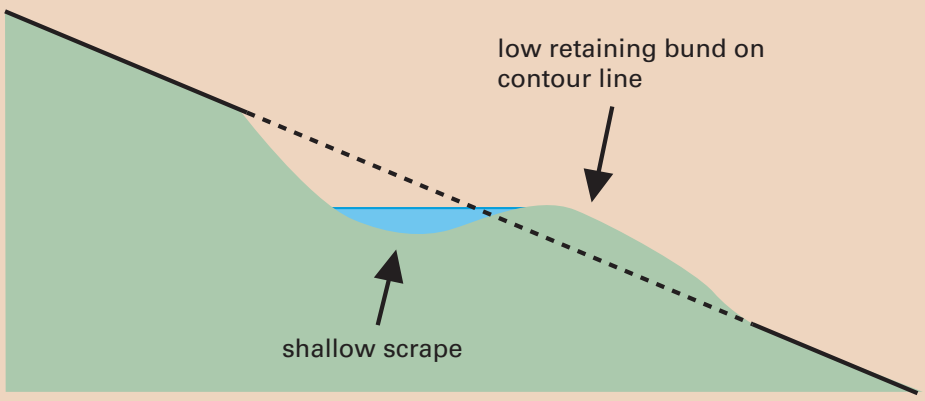
Less edge effect

Management of the sward in the field may also be a factor when deciding on scrape design. If mowing is used, keep the scrape layout simple. Shallow scrapes can be 'mown through'.

Spoil

The scrape must be kept open. Spoil from the newly created scrape should be spread thinly across the surrounding field surface. If spoil is piled in a 'bund' alongside the scrape, it should be kept very low. Scrapes can be created on slight slopes, in which case follow the contours of the slope, and use the spoil to create a low retaining bund on the downhill side of the scrape (see diagram below).

Figure 2. Creating a scrape on a slight slope



In and out flows

Creating scrapes where water levels can be controlled will be beneficial. Scrapes can be created along ditch lines where they are fed from the ditch (see picture 2), or it may be possible to divert a supply of water to feed the scrape.

Scrape (Gary Woodburn)

Picture 2: Scrape created by blocking a ditch with a simple concrete dam, then excavating a shallow scrape behind the dam, using the ditch as a water source.

Providing an outflow with a control sluice will allow levels in the scrape to be controlled. Figures 1 and 2 illustrate creating a scrape by using an existing land drain.

Field and scrape management

Once the scrape is created, it is important to manage the surrounding area to maintain the effectiveness of the scrape. Graze the field and scrape area, ideally with cattle (picture 3), to create a varied sward structure (predominantly short but with scattered rushes and tussocks). During the bird breeding season, use the minimum number of stock necessary to create this target sward structure.

Redshank (rspb-images.com)

New Scrape (Andrew Gouldstone)

Picture 3: Belted Galloway grazing next to a newly-created scrape as part of a wet grassland management programme

Allowing cattle access to the scrape will puddle the edges and keep marginal vegetation short. This will help to maintain good open wader feeding areas.