

Enniskillen Campus

Enniskillen BT74 4GF

Tel: 028 6634 4853

Fax: 028 6634 4888

Greenmount Campus

Antrim BT41 4PU

Tel: 028 9442 6601

Fax: 028 9442 6606

Loughry Campus

Cookstown BT80 9AA

Tel: 028 8676 8101

Fax: 028 8676 1043

Textphone: 028 9052 4420

E-mail: enquiries@cafre.ac.uk

www.ruralni.gov.uk

Field Boundary Management is one of a series of Agri-environment workshops provided by CAFRE. Others include:

Cross Compliance**Dealing with Farm Wastes**

If you are interested in attending additional workshops please call Greenmount Campus, CAFRE on 028 9442 6879 to book your place.

November 2008

Field Boundary Management



Agri-Environment Training Programme



Page

3	Introduction
4	Exercise 1 - Identifying field boundaries on your farm
6	Exercise 2 - Field boundary management checklist
9	Exercise 3 - Establishing a new hedge
10	Hedgerow Management - 'Ideal hedgerow', Sheugh management, Hedgerow restoration & Planting
17	Open College Network Northern Ireland (OCNNI) Accreditation
20	Further Advice and Information
22	Other Useful Contacts

Introduction

The Northern Ireland farmed landscape is characterised by field boundaries. They provide shelter for stock, nesting cover for birds and a variety of habitats and food for wildlife. Effective management is important to ensure field boundaries are maintained and continue to provide shelter and a valuable habitat for wildlife.



About this workbook

This workbook has been produced to accompany the *Field Boundary Management* workshop. It contains exercises, which may be useful in helping you to apply what you have learned to your own farm and information on hedge management, restoration and planting. Although completing such exercises may be new to you, the main points to bear in mind are that the exercises are:

- Not compulsory, unless you wish to obtain accreditation;
- Straightforward and will have been explained to you during the workshop;
- Involve a minimum of writing.

There are three exercises to complete:

- 1** Identifying field boundaries on your farm;
- 2** Assessing field boundary management;
- 3** Establishing a new hedge.

If you complete the exercises successfully you can obtain accreditation from the Open College Network Northern Ireland (OCNNI). Refer to page 17 for further details.

Exercise 1 - Identifying Field Boundaries On Your Farm

1 Record the types of field boundary on your farm

Using an up to date copy of your farm map, look at each boundary and mark it as being a hedgerow, earthbank or stonewall (*see example overleaf*). Fences should also be marked for completeness. Use the following codes to label your map:

SW:	Stonewall
H:	Hedge
F:	Fence
SH:	Sheugh
EB:	Earthbanks

If your farm map is not up to date contact **DARD Grants and Subsidies Inspection Branch** staff for an up to date copy (for contact details see page 21).

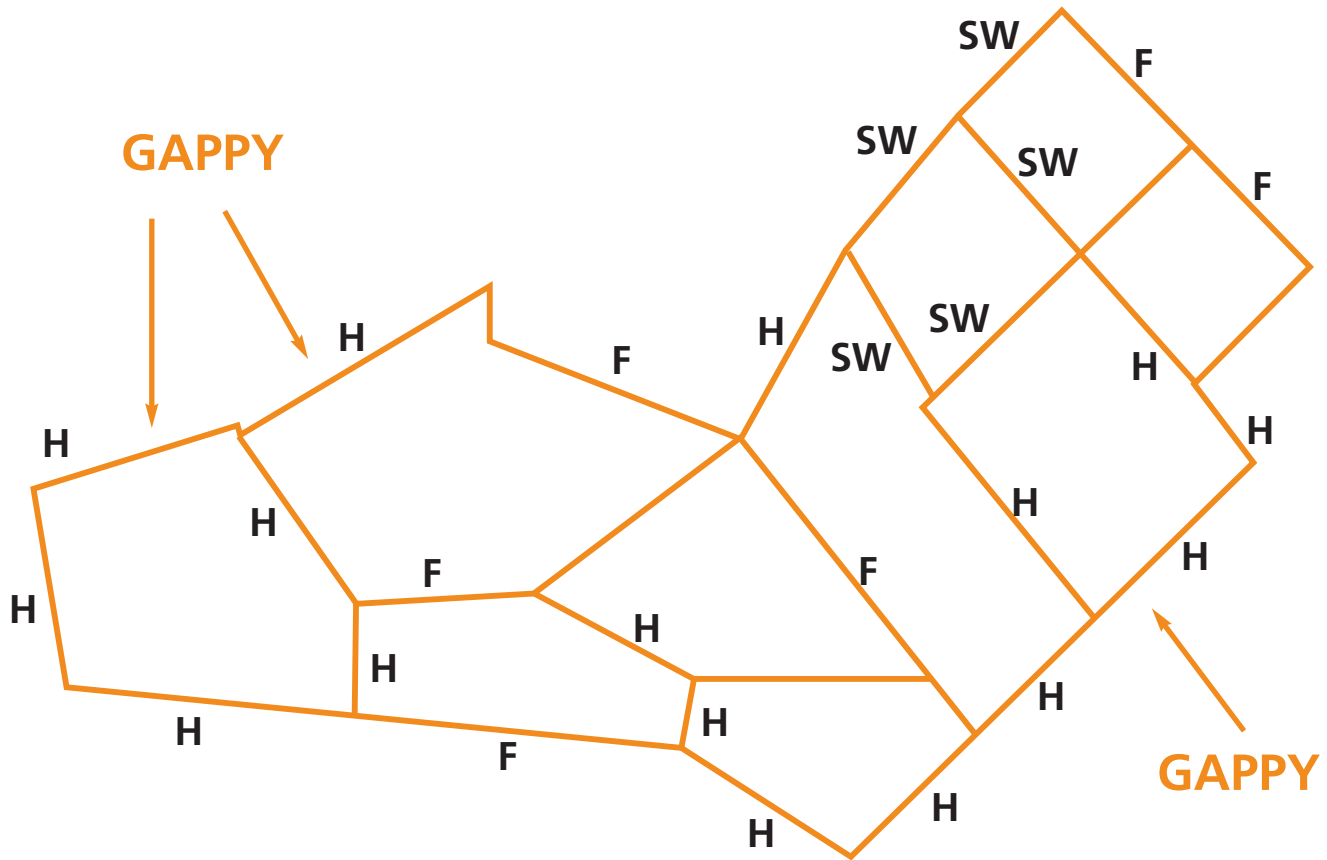
2 Identify three hedges in need of restoration

Identify three hedges in need of restoration by laying, coppicing and/or replanting. Refer to page 11 for information regarding hedge restoration.

On your farm map highlight these boundaries by marking them as '**gappy**' (*see example overleaf*).



Example - Identifying Field Boundaries On Your Farm



Key:

SW: Stonewall

H: Hedge

F: Fence

Place your completed farm map here in this booklet.

Exercise 2 - Field Boundary Management Checklist

Use the following checklist to help you assess field boundary management on your farm. Tick one correct statement for each question.

- 1 What procedure do you need to follow if you intend to remove any field boundaries?
- a. Contact DARD for permission
- b. Remove field boundary without permission
- c. Contact your contractor for permission
- 2 During what month(s) do you or your contractor normally cut your hedges?



Cross-Compliance, Good Farming Practice and Agri-Environment Scheme Field Boundary Rules

Cross-Compliance

(for farmers in receipt of Single Farm Payment)

& Good Farming Practice

(for farmers in receipt of Less Favoured Compensatory Allowances, and/or Agri-environment scheme payments)

must not:

- Remove field boundaries except by prior written permission from DARD;
- Cut, coppice or lay hedges between 1st March and 31st August.

Agri-Environment Scheme

Participants in an Agri-environment scheme **must also:**

- Maintain a variety of hedge heights and widths;
- Only cut hedges in a 2-3 year cycle, except roadside hedges for safety reasons;
- Allow suitable hedges to grow uncut for five years or longer, trimming sides only as necessary;
- Retain mature trees and allow saplings to grow into hedgerow trees;
- Maintain all external boundaries (march ditches) in a stock-proof condition to maximise biosecurity;
- Avoid applying slurry, fertiliser and pesticides within 1metre of a hedgerow bottom.

Now, compare your answers at 1 & 2 with the Field Boundary Rules on page 6.

- 3 Do you need to consider making any changes to your current field boundary management on your farm to comply with Cross-Compliance, Good Farming Practice (GFP) and/or Agri-environment schemes?**

Yes No

If **YES**, please note how you will change your field boundary management:

- 4 What height should hedges be cut to?**

1.2m - 1.5m (4 - 5 feet) At least 1.8m (6 feet)

- 5 Should you mark some hedgerow trees so that they are retained during hedge cutting operations?**

Yes No

- 6 What shape should the "Ideal Hedge" be?**

Square box shape 'A'-shape with gently sloping sides

- 7 What distance should you keep out from the hedgerow bottom when applying slurry, fertiliser or pesticides?**

- a. 0.5m
 b. 0.75m
 c. 1.0m

8 How often should internal hedges on your farm be trimmed?

- a. Cut all internal hedges every year
- b. Cut one side of each hedge every year
- c. Cut hedges on a 2-3 year rotation

9 Which of these hedges is best for wildlife?

- a. Tightly trimmed box-shaped hedge
- b. Well managed, about 1.8m high (6 feet high), wide at the base with hedgerow trees
- c. Gappy hedge



Exercise 3 - Establishing A New Hedge

Use the following exercise to highlight some important aspects when planting a new hedge. Tick one correct statement for each question.

1 During which months should a hedge be planted?

- a. April - June
- b. April - September
- c. October - February

2 What proportion of species mix should the hedge contain?

- a. 100% hawthorn
- b. 75% hawthorn, 25% other native species
- c. Doesn't matter as long as it's a native species

3 Which statement is the correct planting layout?

- a. Two parallel rows, with the quicks diagonally staggered
- b. A single row
- c. Three parallel rows

4 What distances should the two fences protecting the hedge, be apart?

- a. 0.5 metres
- b. 2.0 metres
- c. Any distance

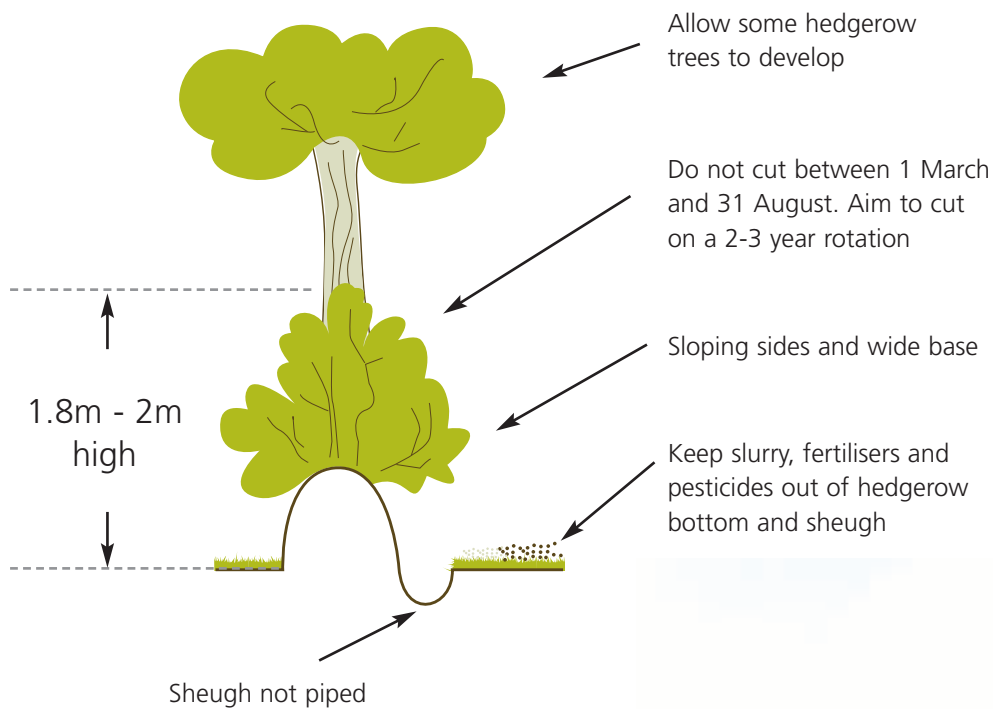
5 Why are hawthorn quicks pruned down to 10cm after planting?

- a. To make the hedge look more uniform and tidy
- b. To encourage the hedge to push out shoots lower down and create a thicker, more stock proof hedge
- c. To help the quicks survive the winter

Hedgerow Management

The 'Ideal' Hedgerow

Routine hedge management to achieve the 'Ideal' hedgerow is good practice whether your farm is in an agri-environment scheme or not.



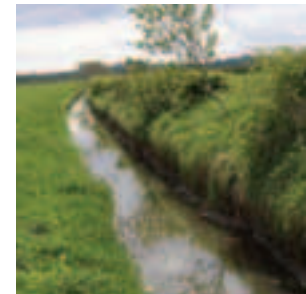
Sheugh management

Although the main purpose of sheughs (or ditches) is to drain the land, they are also valuable landscape and wildlife features, important for many plants, animals, birds and insects. Sheughs should therefore be managed, not only as drainage channels, but also as valuable wildlife habitats.



Carry out maintenance and cleaning:

- Every 3-4 years, during autumn to late winter.
- Retain as many water loving plants as possible.
- Leave vegetation untouched along one side of sheugh at cleaning.
- Avoid deepening and widening sheughs.



Points to remember:

- An exemption for spreading spoil from the sheugh is required from Environment & Heritage Service (contact details Page 22).
- Infilling or piping of sheughs is not permitted under Cross-Compliance, except with prior permission. Permanently dry sheughs can be infilled.
- Agri-environment scheme participants cannot infill/pipe any sheugh/ditch.
- All watercourses, including sheughs must be kept free from pollution.

Hedge Restoration

The following photographs should help you decide which type of restoration is most appropriate for your hedges.

Gappy hedges

A gappy hedge contains plants that are not bushy at ground level. This means the hedge gives little shelter and is not stock-proof. Gappy hedges can be thickened either by laying or coppicing the thorn bushes.



Gappy hedge suitable for laying

Hedge laying is suitable where the stems are up to 10 centimetres (4 inches) in diameter and 2.5-3 metres (8-10 feet) high (see photograph on page 11). However,

with due care and attention it is possible to lay thicker stems. All hedge laying should be carried out during late autumn or winter, but not during periods of hard frost.

Use a billhook or slasher to cut out briars or elder and trim back growth on the near side of the hedge. Leave the top of the hawthorn bushy to create an effective barrier once it is laid. Cut living stems close to ground level, roughly three-quarters of the way through, leaving a connecting strap of living tissue. They are then bent over in an upwards direction. Always lay the stems uphill to take advantage of the natural upward movement of sap - stems recover and send out new shoots faster than if laid downhill. New regrowth will sprout from the laid stems and from the stumps. This will help to thicken the hedge. Fencing both sides of the laid hedge will be necessary to protect it from grazing animals. The fence should be placed at least 1 metre away from the hedge on either side.

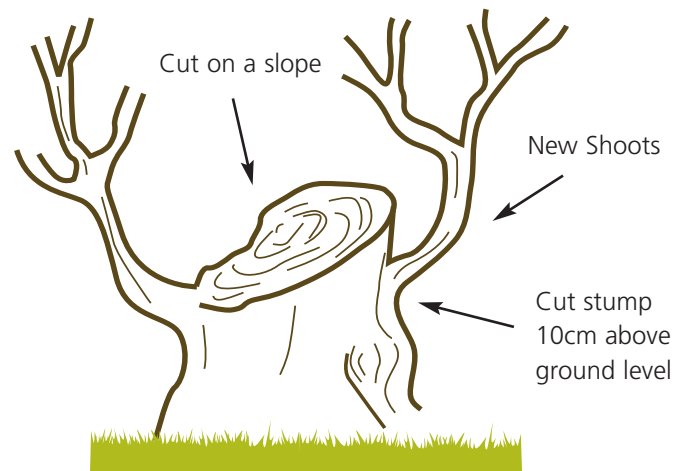


Coppicing is used to restore or regenerate gappy hedges, which have stems too thick for laying (over 10 centimetres or 4 inches diameter). The stem is cut right through,



about 10 centimetres above ground level. Try to cut leaving a slight angle on the stump to let rain run off it. New shoots will emerge from cut stumps. Coppice during the dormant season, preferably February, but not during periods of hard frost.

Close up any gaps by interplanting with new plants such as blackthorn, hazel, holly, guelder rose, dog rose and beech. Include hawthorn if the hedge is less than 75% hawthorn. A single row is acceptable if planting up short gaps in an existing hedge, provided the plants are spaced at 15 centimetres (6 inches) apart. A double row should be planted where gaps are more than 2 metres (6 1/2 feet). Well-rotted farmyard manure can be dug in to



retain moisture and increase nutrients.

Any new areas of planting should be kept free from weeds.

Fencing both sides of the coppiced hedge will be necessary to protect it from grazing animals. The fence should be placed at least 1 metre away from the hedge on either side.



A coppiced hedge with 2 years regrowth

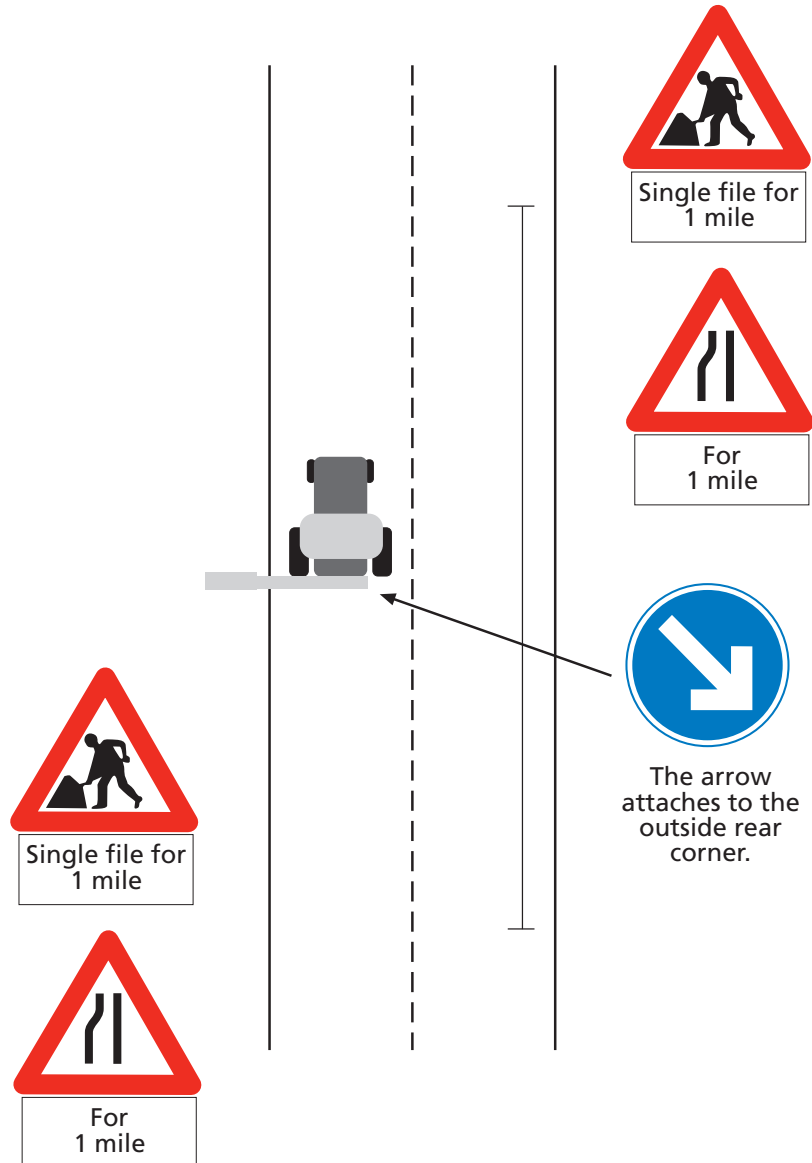
Roadside hedges

Many of our hedges are alongside paths and roads. Roadside hedges need particular care.

On narrow country lanes and alongside public footpaths, it is the landowner's responsibility to ensure hedges do not impair the visibility of motorists or hinder the movement of pedestrians. Special attention is needed at junctions, crossroads, at sightlines at farm entrances and at road signs. This may require the trimming of the side of the hedge facing the road twice a year.

All hedge trimming operations should be avoided during the bird-nesting season from 1st March until 31st August unless the hedge poses a danger to motorists or pedestrians using the road. Under the Wildlife (Northern Ireland) Order 1985, it is an offence to disturb nesting birds. Hedges on the farm should be cut in late winter and only one half to one third of internal hedges should be cut in any one year. The field side of roadside hedges should only be trimmed every 2 - 3 years.

During cutting of roadside hedges, appropriate road signs must be in place.



Establishing a new hedge

Follow the line and contours of the original boundary.

Site preparation. On grassy sites, spray off a one metre wide strip with glyphosate about four weeks before planting. Dig or cultivate a trench 30cm deep and 60cm wide (1 x 2 feet). Alternatively, spray off a one metre wide strip with glyphosate, plough two furrows back to back and plant on the ridge that is formed. Where a new hedge is to be planted on the site of an old hedge, add some well-rotted farmyard manure into the bottom of the trench.

Plant five native hedge species along each 30m length of hedge to be planted. Plant each species in groups along the full length of hedge, e.g. six hawthorn quicks; six blackthorns; one dog rose; six beech; four hawthorns etc.

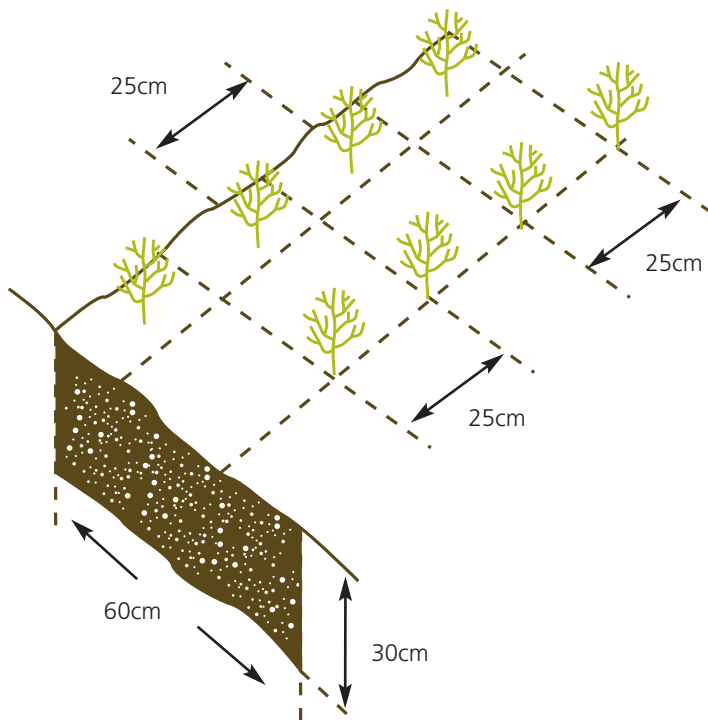
Plant a mixture of species - 75% hawthorn and about 25% mix of other species such as blackthorn, holly, hazel, guelder rose, dog rose and beech. Plants grown from seed collected within N. Ireland are better adapted to our climate and soil conditions.

Include hedgerow trees - in the form of whips along the length of the hedge, placed 10-15 metres apart, avoiding regular spacing of the trees. Suitable tree species are oak, rowan, whitebeam, birch, alder, willow, crab apple and wild cherry.

Plant in mild dry weather between October and March.

Avoid very wet or frosty weather.

Do not let roots dry out. Hedging plants will dry out and die very quickly if the roots are exposed to wind. If there is any delay between purchase and planting, bury the roots of the plants in moist soil. When planting, work the soil in and around the roots carefully and firm the plants into the ground at the same depth as they were in the nursery (marked by a ring around the bark).



Plant a double staggered row - with 25-30 cm (10-12 inches) between plants and 30 cm (12 inches) between rows (approximately 8 plants per metre).

Prune newly planted hedge plants (hawthorn, blackthorn, hazel, dogrose and guelder rose) to 10-15cm immediately after planting to encourage buds to break from the base and produce thick dense growth except holly, beech or hedgerow trees.

Protect newly planted hedges from livestock and rabbits by fencing. To ensure cattle cannot reach over and damage the hedge, it is recommended that fences should be a minimum of 1 metre from each side of the newly planted hedge. Where rabbits or hares are a problem, rabbit-proof netting wire will be needed.

Water the hedge thoroughly in prolonged periods of dry weather during the first summer after planting. Replace any dead plants at the end of the first year.

Control weeds in the first 3- 4 years after planting for successful establishment. Use a one metre wide black polythene strip as a surface cover on all newly planted hedges after planting. Once pruned push the polythene over the top of the cut stumps. Plant holly, beech and hedgerow trees after the polythene is put in place by cutting an X in the polythene. Weigh the polythene down with an inert material - clean quarry waste is ideal. Control any weed or grass growth alongside the polythene for the first few years to prevent these weeds smothering the new hedge.

Open College Network Northern Ireland (OCNNI) Accreditation

If you wish to obtain accreditation from the Open College Network, please follow the steps below:

- 1** Complete the workbook exercises.
- 2** Complete the registration details on the next page.
- 3** Enclose a cheque made payable to Greenmount Campus.

£9 per workshop

- 4** Send your completed workbook and cheque to Agri-Environment Training at Greenmount Campus (full address on page 18).
- 5** Your Field Boundary Management Plan will be returned to you.



Registration form for **OCNNI** accreditation

Name:

Address:

.....

.....

.....

Postcode:

Telephone:

Date of Birth:

Business reference number:

Post the completed workbook, associated material and cheque to:

**Agri-Environment Training
College of Agriculture, Food & Rural Enterprise
Greenmount Campus
Antrim
BT41 4PU**

If you require further information, contact Greenmount Campus

Tel: 028 9442 6879

Assessment

For official use only

Unit Title: Field Boundary Management

Level: 2

Credits: 3

Assessment Criteria	Evidence of Achievement	Completed
Recognise the three main types of field boundaries that occur on the farm.	Farm map showing field boundary types.	
Carry out a basic audit of home farm hedges and identify those, which need restoration through coppicing, laying or planting new hedges.	Farm map showing three hedgerows that would benefit from restoration.	
State the requirements of Cross Compliance and Good Farming Practice in relation to field boundaries.	Successful completion of checklist assessment.	
State the requirements of Agri-Environment Schemes in relation to planting new hedges.	Successful completion of checklist assessment.	

Approved for Accreditation: **Yes** **No**

Assessor: **Date**

Internally Verified: **Date:**

Further Advice and Information

Agri-Environment Training

College of Agriculture, Food & Rural Enterprise
Greenmount Campus
Antrim
BT41 4PU
Tel: 028 9442 6879
Website: www.ruralni.gov.uk

For Training on:

- Dealing with Farm Wastes
- Cross Compliance
- Nitrates Information Meetings
- Nutrient Management Planning
- Hedge Restoration (Coppicing and Laying)
- Dry Stone Walling

Department of Agriculture and Rural Development (DARD) www.dardni.gov.uk

Further information on Agri-Environment Schemes can be obtained from Countryside Management staff at the following DARD offices:

Countryside Management Branch

Headquarters

Lindesay Hall
Loughry Campus
Cookstown
BT80 9AA
Tel: 028 8675 7507
Fax: 028 8675 7511

Kilpatrick House

38/54 High Street
Ballymena
BT43 6DT
Tel: 028 2566 2800
Fax: 028 2566 2838

Sperrin House

Sedan Avenue
Omagh
BT79 7AQ
Tel: 028 8225 1020
Fax: 028 8225 3500

2b Portaferry Road

Newtownards
BT23 3NT
Tel: 028 9181 3570
Fax: 028 9182 2106

Inishkeen House

Killyhevlin
Enniskillen
BT74 4EJ
Tel: 028 6632 5004
Fax: 028 6634 3000

31 Station Road

Magherafelt
BT45 5DN
Tel: 028 7930 2066
Fax: 028 7930 2067

2 Newry Road

Armagh
BT60 1EN
Tel: 028 3751 5650
Fax: 028 3751 5661

DARD Grants & Subsidies inspection Branch Offices

For farm map queries contact:

Co Antrim

Kilpatrick House
38-54 High Street
Ballymena
BT43 6DT
Tel: 028 2566 2800
Fax: 028 2566 2838

Co Down

Rathkeltair House
Market street
Downpatrick
BT30 6LZ
Tel: 028 4461 2211
Fax: 028 4461 8226

Co Londonderry

Crown Buildings
Artillery Road
Coleraine
BT52 2AJ
Tel: 028 7034 1111
Fax: 028 7034 1140

Co Armagh

2 Newry Road
Armagh
BT60 1EN
Tel: 028 3751 5600
Fax: 028 3751 5611

Co Fermanagh

Inishkeen House
Killyhevlin
Enniskillen
BT74 4EJ
Tel: 028 6632 5004
Fax: 028 6634 3000

Co Tyrone

Sperrin House
Sedan Avenue
Omagh
BT79 7AQ
Tel: 028 8225 1020
Fax: 028 8225 3500

For Environmental Impact Assessment queries contact

Environmental Policy Division

Room 651
Dundonald House
Upper Newtownards Road
Belfast
BT4 3SB
Tel: 028 9052 4326

Other Useful Contacts

Department of the Environment and Heritage Service

Klondyke Building
10 Cromac Avenue
Lower Ormeau Road
Belfast
Tel: 028 9056 9230
Website: www.ni-environment.gov.uk

Department for Regional Development Roads Service

Clarence Court
10-18 Adelaide Street
Belfast
BT2 8GB
Tel: 028 9054 0540
Website: www.roadsni.gov.uk

Health and Safety Executive for Northern Ireland

83 Ladas Drive
Belfast
BT6 9FR
Tel: 028 9024 3249
Website: www.hseni.gov.uk

Department of the Environment Planning Service Special Studies Unit

(for infilling queries)
Tel: 028 9041 6886
Tel: 028 9041 6887

Royal Society for the Protection of Birds

Belvoir Park Forest
Belfast
BT8 7QT
Tel: 028 9049 1547
Website: www.rspb.org.uk