

Fernaig Community Trust – Report on management of fields at Achmore



Fernaig Community Trust contacted SAC to obtain advice on control of rushes and suitable management of fields at Achmore. Fields are currently let out and are grazed at differing stocking rates, cut for silage or cut for hay.

5 of the fields at Achmore were walked over on the 2nd July 2010, and samples of soil taken from 3 of the fields.

All of the fields contain improved grassland, although low inputs of fertiliser and lime are evident from the native wildflowers and herbs. Fields which have been moderately grazed or mown have good swards of grass and herbs; however fields which have had low grazing levels are now infested with rushes and weeds.

It appears that the grazing level in some fields is insufficient at present to maintain a good grassland sward. 'Improving' the sward through topping, fertilising etc is an expensive exercise, therefore is wasteful if the grass isn't being utilised. Allowing the grass to grow long and seed lowers the energy and protein content, and in addition results in the sward being too long for sheep and, perhaps, cattle to utilise.

Fields which are being actively managed through grazing and/or mowing and where production level is important, would benefit from soil samples being taken and appropriate lime and fertiliser added, in order to maintain production level and reduce competition from weeds.

Alternative options might be to utilise fields as grazing lets, allotments, native woodland, wildflower meadows etc. One idea put forward by the Trust was to start a small dairy herd, in order to supply milk to the local cheesemaker.

The field (Number 7) which is dominated by rush can be improved by destroying the rushes and adding fertiliser and lime to encourage grass growth.

Results of soil analysis

Samples of soil were taken from fields 4, 7 and 9 and analysed for pH, levels of phosphorus, potassium and Magnesium.

All fields have a pH of 5 or below. The optimum pH for grass growth is 6, therefore all of these fields would benefit from an application of lime. All fields had a low phosphorus level. Phosphorus is required for seedling growth and grass and clover growth, therefore an application of phosphorus in the form of phosphate from Farm Yard Manure or artificial fertiliser, will improve grass coverage and encourage clover growth. The potassium levels are in the moderate range, probably maintained by urine and dung from grazing animals. The Magnesium level is moderate, and is less of a concern in this situation.

The analysis of each field is attached.

Rush control

The best method of ongoing rush control is to encourage good grass growth and drain wet areas. Field 7, which is dominated by rush growth, would need to have the rushes topped and then the young regrowth sprayed. Using a selective herbicide will help to prevent grass being killed.

Timetable:

May/June	Top rushes to a height of 30cm.
June/July	Spray using a tractor mounted sprayer, or weed wipe with a quad or tractor. Use herbicides containing MCPA or 2, 4-D. Note that the sprayer operator should hold a certificate of competence in the relevant method of spraying.
August	Further cutting and removal of the dead rushes to allow grass growth. Apply Ullapool or Torrin lime at a rate of 7t per hectare (normally spread by a contractor).
April/May	Apply 300kg per hectare of DAP fertiliser to add nitrogen and correct the phosphate deficit. Alternatively, apply 20t per hectare of Farm Yard Manure.
August	Apply a further quantity of lime at a rate of 7t per hectare.

Options for management

1. Increase grass sward output

All of the fields can be made more productive in terms of grass quality and quantity. This might entail use of chemicals to control weeds or topping (mowing at height), adding liming agents to increase the pH of the soil, and adding fertilisers (organic or chemical or both).

Pros:

Fields look 'tidier';

output in terms of livestock growth or quantity and quality of hay or silage is increased;

higher rent can be charged.

Cons:

Fields must be managed by grazing at the correct level throughout the year;

Removal of weeds and herbs reduces biodiversity;

Capital expenditure is required for fertilisers and lime

2. Increasing biodiversity

Many of the fields contained yellow rattle, self heal, tormentil, creeping buttercup, forget me not. Native wildflower mixes could be sown out to increase the density of

wildflowers in the grassland, increasing biodiversity and providing food source for insects and birds.

Pros:

Fields look 'attractive' in June and July;
Habitat for small mammals, insects and birds is improved

Cons:

Fields appear 'untidy' for much of the year;
Output is reduced as energy and protein values of the sward will be lower;
Capital is required to purchase and sow out wildflower mixes;
Grazing or topping is required in autumn;
Grazing is unavailable in summer to allow wildflowers to seed.

3. Do nothing

Pros:

No expense incurred;
Depending on grazing level, wildflower and herb content may increase

Cons:

Fields with soft rushes will become dominated by rush;
Grass sward quality and quantity will decrease;
Bracken will encroach from neighbouring land.

4. Improve grassland and start a dairy herd

The fields could support a small herd of dairy cows, providing grass and silage which would make up the bulk of the energy requirements of the cows. Additional concentrate feed would be required with the amount depending on the quality of the forage and the milk yield.

Pros:

Active management of the land;
Provision of employment;
Enhances local business;
Possible source of income.

Cons:

Capital required to set up parlour, purchase stock and equipment;
Regular skilled labour supply might be difficult to find;
Reliance on one purchaser.

Financial viability would largely depend on the initial set up costs and labour cost. Grants may be available through SRDP Rural Priorities or Leader, or Lottery funding. Grant may also be available to carry out a feasibility study.