

AGAP Review

This review will attempt to determine the success of the Alderney Grazing Animals Project.

INTRODUCTION

The Alderney Grazing Animals Project was launched in 2003, initial grazing an area of...ha with 2 mature, and one juvenile Guernsey cattle and ...ha with 1 pony. Over the 8 years since its launch, it has now expanded to a herd of 6 cattle and 1 pony, grazing ...ha

The aims of the scheme are 3 fold:

1. To maintain the diversity of the species rich dune grassland at Longis Common, and possible improve the diversity of the grassland at Monnez Quarry and at the higher levels of Longis Common.
2. To manage this land for minimum financial outlay
3. The use of traditional farming methods is also hoped to maintain a positive public profile of the Trusts work

Several floral surveys of the land grazed have been conducted (David and Ozanne, 2004; Strevens, 2007 and Hampshire Botanists, 2010).

Good quality Dune Grasslands are nationally scarce, and so Longis Common is of direct conservational importance. Most Dune Grasslands in the UK are designated Sites of Special Scientific Interest (SSSI's) for this reason.

Longis common was grazed using traditional methods up until ... (DATE), after which the grassland was left fallow, and succeeded to tall rank grassland with patches of dense scrub and bracken. Not only does this succession lead to the 'shading-out' of the more delicate (and thus often the most rare) plants but it meant that areas of the common were becoming inaccessible to the public due to the encroachment of dense brambles.

CONSERVATION

3 surveys of the floral diversity have been conducted across Longis Bay grazing sites. The methodologies used between these surveys differed considerably so it is difficult to conduct comparisons which allow the effect of the grazing scheme on the diversity of the grassland to be calculated.

After examining the data, the following may be concluded, however it must be noted that these are only personal interpretations and further research is needed to provide evidence to support them:

- After the 1st year, grazing reduced the diversity of the grassland, however this increased in the following 3 years (from an average difference between the stocked and un-stocked plots of -2.2 species to +3.1 species. Possible causes of this trend; it may take this period of time for the seed stock within the grazed plot to germinate and become apparent, it may be that it took longer than 1 season for the grass to be reduced to a level to allow other species to colonise or it may be that the grazing intensity during the first year was not adequate to significantly improve the sward. (It should be noted at this point that the 2007 survey recorded higher species abundance within the un-stocked plots than the 2004 survey).

- There does not appear to be any significant difference in species diversity with the type of grazer (i.e. horse, cattle, or mixed). However they may have an impact on the abundance of the relative species. This needs to be considered when the methodology for the floral surveys are determined.
- Also of note, which may be investigated further; the area of land which received the highest intensity of grazing contained the highest diversity of forbs (Strevens, 2007).

Grazing density – a large proportion of the conservation value of schemes such as this is determined by the grazing intensity and timing. For grasslands such as this it is best to avoid grazing between April and July to allow forbs to flower and set seed. Outside of these months, intensity should be enough to create areas of open ground and crop some patches very short. More care needs to be taken when the grassland is being grazed by Horses as, due to their selective methods of grazing, when grazing pressure is too high entire species can be eliminated from the sward.

FINANCIAL

The accounts of the AGAP scheme from 31/01/2007 to 18/01/2011 have been calculated, details of which are included in appendix 5. The total profit over this 4 year period has been calculated at between £694.95 and £1,871.16, or £173.74 to £467.79 per annum. These figures do not account for labour spent which, although mainly voluntary, may need to be considered as it takes up labour which may be needed on other projects.

PUBLIC OPINION

Created a press release, which was included in the Alderney Journal, 28/01/2011, requesting the public to comment on the scheme, unfortunately no feedback was received. Recommend creating a questionnaire and asking the local community in person for feedback, with concentrated focus on the walkers who utilise Longis Common and so are most affected by the grazing scheme.

It is understood that there has been a degree of negative public opinion with regards to the quality of the meat produced. The initial meat was regarded as very tough, but has since improved. It may be beneficial to provide samples of the meat, freshly cooked at a high profile local event. I also recommend pushing for sales on fresh meat, not only because the meat will be of a higher quality as it has not been frozen, but this will also reduce the storage needed for the meat, and may allow electricity costs to be reduced.

To reduce the impact on walkers; ensure the fencing is removed quickly once the cattle have been removed.

ALTERNATIVES

Due to the conservation importance of Dune Grasslands, it is understood that Longis Common must be actively managed. One alternative to this grazing scheme would be to mechanically cut the grassland, effectively converting the grassland into a meadow. This would allow roughly 80% of the land currently managed to be cut. Some areas would be scalped which, over time, would create a more even landscape. A degree of heterogeneity could be obtained by varying the height and frequency of cut across different areas. For example, the better quality grassland at the base of Longis Common, nearest the Bay, would need to be cut very regularly to maintain the short sward which a large proportion of delicate forbs require, whereas the higher grassland may need to be cut once per annum.

The benefits of this scheme; it would allow a different floral pattern to develop, especially if grassland is only cut once per annum. It may be preferred by users of the common, especially dog walkers who are often concerned with the presence of cattle.

If this land were to be managed using mechanical means, it is estimated to cost roughly £5 per hectare, and is labour intensive means of maintaining this grassland, thus demands on labour would not be expected to reduce.

RECOMMENDATIONS

Formalise a methodology for floral surveys

Increase sales of fresh meat after butchery

Conduct research to conclude public opinion of the scheme

If possible, reduce the input of supplementary feed, not only will this be beneficial financially, but will reduce the risk of increasing the nutrients in the delicate grasslands.

CONCLUSIONS

Due to the current cost-effectiveness of the scheme, and the financial cost of disposal of the cattle were AGAP abolished, it is recommended that it is maintained for at least a period of 5 years, during which time stringent floral surveys should be conducted to better determine the conservation benefits of this scheme. When sufficient data has been collected to allow accurate comparisons to be performed, a second review should be undertaken.

REFERENCES

APPENDICES

Appendix 1

Map of Longis Common grazing areas

Appendix 2

Transects	A	B1	B2	C	D	E	Average
Stocked	7.5	6.3	6.4	6.7	6.3	7.9	6.8
Un-stocked	8.0	7.8	10.0	8.3	10.3	9.8	9.0
Difference	-0.5	-1.5	-3.6	-1.5	-4.0	-1.8	-2.2
Grazers	Cattle	Cattle	Horse	Horse	Horse	Cattle	

Table 1: Summary of David and Ozanne (2004) results; the species richness within quadrats along 5 transects across Longis Common. Methodology, site maps and full results are available upon request.

Appendix 3

Transects	A1	A2	B	C	D	Average
Stocked	17.2	13.7	15.6	13.1	15.7	15.1
Un-stocked	9.9	9.5	14.2	15.0	11.4	12.0
Difference	7.3	4.2	1.4	-1.9	4.3	3.1
Grazers	Cattle	Cattle	Cattle	Mixed	Horse	

Table 2: Summary of Strevens (2007) results; the species richness of 5 areas within Longis Common. Methodology, site maps and full results are available upon request.

Appendix 4

Transects	1	2	3	5	Average
Sp. Richness	12.3	12.4	11.7	12.5	12.2

Table 3: Summary of results of a survey conducted by the Hampshire Botanists (2010); the species richness within quadrats along 4 of the 5 transects outlined by David and Ozanne (2004). Methodology, site maps and full results are available upon request.

Summary of Hampshire Botanists (2010) results

Appendix 5

Financial report of AGAP scheme, Jan 31st 2004 – Jan 18th 2011

Expenses

Cattle	Purchase	-£940.00
	Medical treatments	-£44.88

	Feed and Water	-£1,827.44
	Slaughter and Butcher	-£1,738.00
Equipment	Fencing	-£725.07
	Other	-£182.78
Other		-£354.19
TOTAL		-£5,812.36

Gains

	Meat Sales	£4,284.29
	Donations	£934.62
TOTAL		£5,218.91

Capital

	Cattle	£360.00
	Meat	£928.40 (Min)
		£1,176.21 (Max)
	Profit (07-11)	£694.95 (Min)
		£942.76 (Max)
	Profit per annum	£173.74 (Min)
		£235.69 (Max)

Averaging £174 - £236 profit each year
(assuming that all the meat is sold, and the remaining 2 cattle
are sold for £360 profit)

These expenses cover from 31/01/07 to 18/01/11. Since these accounts were calculated, 1 cow has been to slaughter and butchered, but a large proportion of its meat has already been sold. This will also increase the figures for the capital. These figures also don't take into account the meat used for burgers at events, without which extra costs would have been expended.

Over this period, of roughly 4 years, total expenditure has equalled £5,812.36, with the largest costs being supplementary feed and slaughter and butcher charges. £4,284.29 has been produced through sale of meat and £934.62 has been obtained through donations. At the time of this calculation, 2 cattle remained which are to be slaughtered this year, assuming these are sold for at least the £360 purchase price, these are capital. There is a substantial proportion of meat remaining which is still suitable for sale. If this meat is sold for its maximum retail value, this equates to £1,176.21. The minimum sale price would be as 10kg boxes, with a membership discount; in which case this meat equates to £928.40 capital.

Appendix 6