

GAP Information leaflet 6 Animal health plans

1. What are animal health plans and why bother?

- These are required as part of conversion to organic status, and are recommended under the code of recommendations for the welfare of livestock, but can also be excellent management tools in their own right, especially with the increased concentration and movement of cattle, and bearing in mind the risks of major disease outbreaks
- They focus on using animal husbandry skills and good pasture management to prevent disease and reduce routine use of medicines; they are not just a list of vaccinations!
- Healthy livestock are better able to achieve conservation and production targets
- The plan should be agreed with a veterinary surgeon
- It should be a flexible working document that is monitored and updated as necessary, e.g. whenever disease problems occur. Consider how the health plan can be adapted to reduce and deal effectively with future recurrences
- It is a reference document for all personnel dealing with stock and thus all should be consulted on its preparation
- Health plans also help to save money and set targets for improvements
- It can be incorporated in to an overall grazing policy that covers everything relating to the livestock and grazing operation that you run, from specific site management objectives to compliance with health and welfare regulations
- NB: Every farm and livestock system is different, as are individual management objectives, therefore
 every plan will/can be different, and therefore this information leaflet is not meant to be a definitive
 document for each situation, nor a definitive list of animal diseases

2. Disease prevention and treatments

- Disease prevention is based on the following:
 - Selection of appropriate breeds of animal that can adapt well to local conditions and have good vitality and disease resistance
 - o Good husbandry that encourages strong disease resistance and prevents infection
 - o Use of high quality feed and access to forage, e.g. clean grazing worm control strategies
 - o Appropriate stocking densities and regimes
 - Good standards of biosecurity to prevent disease
- Sick or injured animals must be treated immediately
- For specific advice on individual disease problems and their prevention and treatment consult a veterinary surgeon

Case study:

The Davies family run 5,000 welsh mountain ewes in the Preseli hills in Pembrokeshire. Monitoring for intestinal worms using faecal egg counts cut their 2004 drench purchase bill by £500 and saved two weeks labour.

3. Writing a plan

See appendix 1 for an example of an Animal Health Plan

i.) Introduction:

 Describes the farm and holding, including premises and land available and summary of grazing regime including the aims and objectives of grazing as well as the expected outputs

ii.) Outline of the Livestock System:

 The Land: - More detail including how the total area is split up and any management restrictions or subsidies that affect the land

• The Livestock: - A description of the numbers, ages and types of stock and whether they are owned or borrowed. Include a description of the expected products of the grazing enterprise and how the animals will be used for these ends

iii.) Housing:

- Description of housing available, when and how it is used
- Include information on cleaning, disinfection and routine maintenance of buildings and equipment, and use and disposal of soiled and/or contaminated bedding

iv.) Feed and water:

- Description of the forage available from the land and a detailed description of what mineral and/or forage supplements will be given and under what circumstances, especially under emergency conditions, e.g. drought, heavy snow and flood
- Include observations of the grazing/browsing behaviour of the animals that might indicate nutritional deficiencies

v.) Record keeping

- Ensure appropriate records are kept:
 - o Continuous flock/herd records
 - Passports
 - Movement book
 - o AML1
 - o Medicine record

Case study: The ADAS Pwllpeiran Welsh Black herd has an Animal Health Plan:

Key elements:

- 1. Leptospirosis vaccination due to high level of infection in the herd
- 2. Bulls only purchased from high health status herds
- 3. Biosecurity measures in place
- 4. Annual review with vet
- 5. Johnes disease eradication programme
 - Annual testing
 - Culling of reactors
 - · Regular cleaning of water and feed troughs
 - Daily scraping of cattle sheds
 - Avoidance of stress
 - All female replacements home bred
 - New bulls tested and quarantined
- 6. BVD not present and measures to prevent its occurrence in place
- 7. IBR free accreditation expected by 2006

	Before plan	After
Conception rate (%) % calves born alive (%)	79 88	93 91
Gross margin (£/cow) Gross margin (herd)	376.46 24,740	451.46 29,345

vi.) Training

Outline current experience of staff, past training and future requirements

vii.) Fire and emergency procedures

A plan of action for emergencies, e.g. fire in housing system

viii.) Livestock Health Plan:

- General approach: A description of the general regime followed to ensure the health of the stock e.g. selective breeding
- Detailed information about breeding regime, what animals are used in which parts of the site & why?
- Areas where changes are needed are identified
- Where necessary, disease level targets for the next 12 months are established
- Veterinary routines:
 - A summary of the thinking behind the veterinary routines, alternative control and treatment
 - Strategies and management / husbandry practices, based on organism life cycles and disease epidemiology/factors
 - o A list of routine treatments that are used and under what circumstances, especially preventative management (e.g. vaccinations, clean worm strategies)
 - o Clinical treatments that would be used to deal with specific problems
 - A list of any diseases that have presented problems in the past on the holding, and could cause a problem in the future, what treatments were used and their effectiveness
 - Include future intended treatments or action to avoid the disease

Biosecurity

- Biosecurity is the prevention of disease-causing agents entering or leaving any place where farm animals are present
- The following points provide a guide:
 - b. Draw up a written policy and herd/flock health plan, and make sure you, your staff and visitors stick to it
 - o Manage farm visitors, (vehicles and people), & have disinfectant, brushes & water available
 - o Keep farm access routes, handling and parking areas clean and tidy
 - o Don't share injecting and dosing equipment
 - o Implement a pest control programme
 - Dispose of fallen stock properly
 - Keep livestock away from freshly spread slurry for 6 weeks
 - o Breed your own replacements
 - o Regularly clean and disinfect:
 - All equipment used in contact with your animals, including transport and water troughs
 - Buildings used to isolate animals
 - Use mains water for livestock wherever you can, and if possible, fence off stagnant ponds and watercourses that other stock have access to
 - Check your fencing regularly to prevent your stock mixing with neighbouring stock
 - o Check the health of new animals seek veterinary advice:
 - Veterinary inspection and advice pre-sale blood tests? Vaccinations?
 - Health status of animals, area and region being sourced from, e.g. TB, sheep scab
 - Source stock from certified disease free herds/flocks, e.g. Scrapie, enzootic abortion
 - Pre-movement treatments, e.g. broad-spectrum wormer, sheep scab treatment
 - Quarantine and isolate stock from other animals once on farm:
 - □ Contact defra Animal Health Office for detailed advice: www.defra.gov.uk/corporate/contacts/ahdo.htm
 - Keep separate from other stock for 21 days
 - Quarantine buildings/paddocks separate from others by 3 metres
 - f u Use different staff & equipment to handle stock, or handle isolated stock last
 - Dispose of bedding and wash PPE/overalls carefully

Cattle Herd Health Schemes

Herdcare: Tel: 0131 445 6101; www.herdcare.com

Cattle health scheme for control of Infectious Bovine Rhinotracheitis (IBR), Bovine Viral Diarrhoea (BVD), Johnes disease and Leptospirosis

Premium Cattle Health Scheme: Tel: 01835 822456; www.cattlehealth.co.uk www.sac.ac.uk

Cattle health scheme for control of Infectious Bovine Rhinotracheitis (IBR), Bovine Viral Diarrhoea

Sheep and goat health schemes: Tel: 01463 226995 www.sac.ac.uk/consultancy/sghs/

Sheep and goat health scheme for control of Maedi Visna, Caprine Arthritis Encephalitis, Enzootic Abortion, and scrapie

4. References

- Veterinary surgeon, graziers and local farmers
- The Sheep Veterinary Society: http://svs.mri.sari.ac.uk/svsdefault.htm especially for sheep flock health software programme
- The British Cattle Veterinary Association: www.bcva.org.uk especially for cattle herd health software programme
- <u>www.shearwell.co.uk</u> for advanced herd and flock management software programmes and electronic identification systems

Disease prevention and treatments

Case study:

Internal parasites are costing British sheep producers £84m annually, equivalent to £4.79/lamb! A single round of genetic selection for resistance to worms in terminal sires would save £21m of these costs!

Other costs are estimated at:

Sheep scab £8m
Foot rot £24m
Chlamydial abortion £20m
Toxoplasmosis £12m

- Organic Farmers and Growers: 'A guide to developing animal health plans for organic livestock units' –
 Technical Leaflet 105; available from Available from OF&G Certification Office: 01743 440512
- www.google.co.uk
- National Beef Association: Tel: (01684) 565442; www.nationalbeefassociation.com
- National Sheep Association: Tel: (01684) 892 661; www.nationalsheep.org.uk
- National Animal Disease Information Service lots of advice on animal diseases: <u>www.nadis.org.uk</u>
- MLC: <u>www.mlc.org.uk</u> and <u>Http://store.mlc.org.uk/index.asp?50525</u>: Numerous advice sheets on animal diseases available as pdf files to download
 - <u>www.organic-vet.reading.ac.uk</u>: **information on animal diseases & how to deal with them**. For each condition the following aspects are covered:
 - o A literature review of current understanding on prevention and control of the disease
 - o A description of conventional treatment
 - o A short statement on the welfare significance of the condition
 - o Practical suggestions that is acceptable under organic standards
 - o Sources of further information

- www.defra.gov.uk
 - Code of recommendations for the welfare of livestock goats: PB0081 www.defra.gov.uk/animalh/welfare/farmed/othersps/goats/pb0081/goatcode.htm
 - Code of recommendations for the welfare of livestock cattle: PB7949 <u>www.defra.gov.uk/animalh/welfare/farmed/cattle/booklets/cattcode.pdf</u> <u>www.scotland.gov.uk/Resource/Doc/55971/0015787.pdf</u>
 - Code of recommendations for the welfare of livestock sheep: PB5162 www.defra.gov.uk/animalh/welfare/farmed/sheep/booklets/sheep.pdf www.scotland.gov.uk/Resource/Doc/55971/0015791.pdf
 - Code of recommendations for the welfare of livestock pigs: PB7950 <u>www.defra.gov.uk/animalh/welfare/farmed/pigs/pigcode.pdf</u> www.scotland.gov.uk/Resource/Doc/55971/0015790.pdf
 - Code of recommendations for the welfare of livestock: Animal Health and Biosecurity: www.scotland.gov.uk/Resource/Doc/47007/0017624.pdf
 - Equine Industry 'Welfare Guidelines Compendium for Horses, Ponies & Donkeys': www.newc.co.uk/codes/documents/EquineCompendium17.11.05 000.pdf
 - Improving calf survival, PB 3335

 www.defra.gov.uk/animalh/welfare/farmed/cattle/booklets/calfsurv03.pdf
 - Condition scoring beef suckler cows and heifers, PB 6491 www.defra.gov.uk/animalh/welfare/farmed/cattle/booklets/pb6491.pdf
 - Condition scoring sheep, PB 1875
 www.defra.gov.uk/animalh/welfare/farmed/sheep/pb1875/sheeptoc.htm
 - Improving lamb survival, PB 2072 <u>www.defra.gov.uk/animalh/welfare/farmed/sheep/pdf/lambsurvival.pdf</u>
 - Lameness in sheep, PB 1149
 www.defra.gov.uk/animalh/welfare/pdf/sheeplameness.pdf
 - Better biosecurity: PB 7350
 www.defra.gov.uk/animalh/diseases/pdf/biosecleaf.pdf
 - o SCOPS: 10 things you should know if you want to keep farming sheep www.defra.gov.uk/animalh/diseases/control/SCOPS10things.pdf
 - SCOPS: New worm control strategies www.defra.gov.uk/animalh/diseases/control/scopswormstratgy.pdf
 - SCOPS: Sustainable worm strategies in sheep <u>www.defra.gov.uk/animalh/diseases/control/wormcontrol_BW.pdf</u>
 - SCOPS: Drenching techniques <u>www.defra.gov.uk/animalh/diseases/pdf/scops-drench-technique-leaflet.pdf</u>
 - Guidance on control of Johne's disease in dairy herds www.defra.gov.uk/animalh/diseases/pdf/johnesguidance.pdf
 - Scrapie: advisory notes for farmers

 www.defra.gov.uk/animalh/bse/othertses/scrapie/adv-note.pdf
 - TB in cattle: reducing the risk www.defra.gov.uk/animalh/tb/publications/pdf/tbherd.pdf
 - Blowfly in sheep <u>www.defra.gov.uk/animalh/diseases/pdf/scops-blowfly180507.pdf</u>
 - Sheep scab, PB 4622-E
 www.defra.gov.uk/animalh/diseases/pdf/scops-sheepscab.pdf
 - Control of internal and external parasites in sheep <u>www.defra.gov.uk/animalh/welfare/farmed/advice/posters.pdf</u>
 - Liver fluke <u>www.defra.gov.uk/animalh/diseases/pdf/wormcontrolliverfluke.pdf</u>
 - Golden rules for a healthy flock www.defra.gov.uk/animalh/diseases/control/flock.pdf
 - Golden rules for a healthy herd www.defra.gov.uk/animalh/diseases/control/herd.pdf

- HSE helpline for advice: 0845 345 0055; hse.infoline@natbrit.com
- HSE books, PO Box 1999, Sudbury, Suffolk, CO10 2WA; Tel: 01787 881165;
 www.hsebooks.com/Books/
 HSE books helpline: 01787 884148
- Free self-assessment software for agriculture: www.hse.gov.uk/agriculture/assessment/index.htm
- HSE agriculture: www.hse.gov.uk/agriculture/
- HSE agriculture publications: www.hse.gov.uk/pubns/agindex.htm
 - Common zoonoses in agriculture HSE Agricultural info sheet no. 2, (rev2) <u>www.hse.gov.uk/pubns/ais2.pdf</u>
 - o Handling and housing cattle, HSE Agricultural info sheet no. 35 www.hse.gov.uk/pubns/ais35.pdf
 - o Farmwise: your essential guide to health and safety in agriculture, Misc 165, 01/02, C55 www.hse.gov.uk/pubns/misc165.pdf
 - Reporting incidents of exposure to pesticides and veterinary medicines, INDG 141 (rev1), 2/99, C1000
 - www.hse.gov.uk/pubns/indg141.pdf
 - Veterinary medicines: Safe use by farmers and other animal handlers, AS31, 1/98, C500 www.hse.gov.uk/pubns/as31.pdf
 - o Leptospirosis HSE ID (G) C300
 - Avoiding ill health at open farms advice to farmers (with teachers supplement) HSE Agricultural info sheet no. 23, (rev1)
 www.hse.gov.uk/pubns/ais23.pdf
- SAC, West Mains Road, Edinburgh EH9 3JG; <u>www.sac.co.uk</u>; Tel: 0131 445 5111. SAC publications; follow: www.sac.ac.uk/publications/
 - www.sac.ac.uk/consultancy/livestock/publs/beeftechnotes/
 - o www.sac.ac.uk/consultancy/livestock/publs/sheeptechnotes/
 - www.sac.ac.uk/consultancy/livestock/publs/othersaclivestockpubls/
- Scottish Executive Animal Welfare and movement regulations:
 - O Home page: www.scotland.gov.uk/Topics/Agriculture/animal-welfare
- Specialist shows beef, (location moves, runs every two years); sheep 2006 (three counties showground, Malvern), runs every two years
- Farmers Weekly Interactive: www.fwi.co.uk and/or 020 8652 4903 and/or info@fwi.co.uk
- Farmers Guardian: 01772 203900, www.farmersguardian.com
- Temple Grandin understanding animal behaviour and thus how to handle them: www.grandin.com

Appendix 1 - Animal Health Plan Example

Livestock Management Plan for Organic Holding (2002)

Introduction:

The present, somewhat unconventional farming system is a recent development that has evolved from an organic unit that previously operated out of premises at Bank House Farm. The new operation has no farm premises but is organised around several parcels of bare land, which between them provide year-round grazing and a limited area for winter-feeding. Its main objective is delivery of specific nature conservation objectives on sites that are of designated ecological importance. Levels of production are very limited, although the extremely low stocking rates provide considerable benefits for livestock health in terms of disease and parasite control. This health plan is based largely on experiences gained in running the previous, farm-based system and may have to be modified as the new one is implemented. A process of review will therefore take place in conjunction with the annual organic inspection.

Outline of the Livestock System:

☐ The Land : - The farming system comprises 415 ha of certified and in-conversion land split up into 9
or 10 separate parcels scattered throughout north Lancashire and south Cumbria. All of the land is listed
under the holding's organic schedule and is also listed in its IACS register. All of this land is under some
form of nature conservation agreement and the grazing and/or mowing regimes that operate are designed
primarily for their ecological output rather than animal production. Most of the land is occupied subject to
management restrictions imposed by these various agreements but generally these are not found to
conflict with organic standards.

At the present time 232 ha have been fully organic for at least 5 years and 183 ha were submitted for conversion since February 2002. The holding is registered with the Soil Association (Cert No. G540). The recently acquired land may qualify for a reduced conversion period, having been managed by a government agency (Forestry Commission) that can attest to its having been managed without use of chemicals. This has not yet been approved by SA Cert.

☐ **The Livestock**: - The holding is currently stocked with 45 head of fully organic cattle (mostly Devon and Devon cross) and 36 non-breeding sheep (mainly Hebrideans). More organic cattle are brought in on an agistment basis for periods of 6 months to 2 years, in order to achieve the correct stocking levels needed to secure the conservation grazing objectives.

The owned cattle comprise:

- o 1 Devon bull
- o 6 cross bred suckler cows and 4 calves at foot (various ages)
- o 4 in-calf Devon and Devon-cross heifers (to calve spring 03)
- o 7 Devon cross steers, various ages up to 27 months.
- o 23 bulling heifers 15-27 months old

The main product of this enterprise will be 4 yo organic, in-calf heifers with new heifers bought-in at 15-18 months old. Some steers will be finished organically for sale at up to 30 months of age. The agisted cattle for June 2002 comprise:

o 12 fully organic native breed (Devon, Red Poll, Angus, and Hereford cross) suckler cows with 12 Devon cross calves at foot.

The sheep mainly comprise Hebridean ewes that are not put to the tup but graze year-round for conservation purposes. Older ewes, that become unable to maintain adequate levels of condition on the rough grazing because of loss of teeth or other infirmity will be removed to better land where they can be fattened for mutton. Replacements will be bought in according to need on an annual basis directly from other flocks in the region.

Housing:

Housing of livestock is not a feature of this system. Only sick, injured or otherwise infirm animals will be brought inside either for nursing care until they have recovered or to be in-wintered safely. They will be

kept at Slackwood Farm, a set of premises rented for this specific purpose, offering both loose-box and cubicle accommodation.

Feeding:

The emphasis of this system is grazing and livestock will be obtaining the bulk of their nutritional requirements directly from pasture for most of the year. Where the level of nutrition provided by this means is inadequate for the needs of the livestock (e.g. out-wintered store cattle less than 2 years old), approved non-organic supplements (e.g. dried sugar beet pulp, SBP) will be provided at an appropriate daily rate (i.e. 1-2 kg/head/day). On sites too remote for daily checks an approved non-organic feed block may be used, with maximum intakes restricted to meet organic standards. After the current derogation for using approved non-organic feed ceases in 2005 only fully organic supplements will be used. The holding does have about 4 ha. of meadow land for hay and big bale haylage production. This will provide a reserve feeding resource for winter when bad weather may make pasture inaccessible or cause the supply of grazing to fail.

The only other feed supplement used is seaweed meal. This is mixed in with the SBP to ensure that mineral intakes are adequate. Observation has shown that cattle in this system sometimes take opportunities to eat soil and chew pieces of limestone, perhaps indicating that they are failing to obtain sufficient minerals and trace elements from the pasture. Hypomagnesaemia has affected two animals in the past 10 years although this level of prevalence is not sufficient to warrant specific remedial measures. The in-conversion component of the land will need to be grazed by the holding's existing stock in its first year of conversion, making it important that it can be registered for shortened conversion. Animals will be moved between organic and C2 land so that they avoid exceeding the 40% in-conversion feeding allowance, something made possible by the ready availability of fully converted land in the system.

Livestock Health Plan:

a.) General Approach

The health of the animals on this unit stems from promotion of natural immunity through minimizing stress and selection of animals that are adapted to the challenging circumstances that the system entails. Previously the regime had been based on a closed herd of suckler cows that, over 10 years of selecting the best heifers as replacements, became manifestly better adapted to their environment, with calves able to thrive on unimproved rough pastures and tolerate a range of physical hazards. They have a particularly valuable ability to finish within the 30 month rule, despite going through a prolonged store period (up until 27-28 months) In the course, now, of abandoning this closed system, a way has been found of retaining access to those beneficial genetics since the original cows have been sold to an organic farmer nearby at Settle. This is near enough to retain important links that will allow the genetic base of the previous system to be maintained, even though the functional elements have been divided. The way it will work is outlined below:

The same cows that formed the original breeding unit will return each summer on an agistment basis to graze some of the better land on their original holding
Here they will be running with the same Devon bull that has sired several generations of calves under the previous system. This will ensure almost complete continuity of the genetics that have proved so successful hitherto
Calves from the same male: female pairings will be available for purchasing as stores with which to continue the conservation grazing system.
A new emphasis has, in the meantime, developed towards using older bulling and in-calf heifers to graze the more demanding sites since these types of animal have proved to be more efficient converters of very low quality forage than younger store cattle that would need to be removed for fattening before reaching 30 months. The majority of calves bought-in will therefore be females that can be taken up to 3-4 years of age before calving down for the first time. The extra 18 months that this allows within the rearing phase will considerably enhance the utility of these animals as conservation grazers.
These older animals appear to have more inherent resistance to disease and injury and will therefore enhance the overall levels of vigour and immunity within the herd.

Animal Health Plans	9

☐ The main output from this system will be these older down-calving heifers in their 3rd year.

b) Veterinary Routines:

The strategy for dealing with disease and parasite problems on this holding is based on avoiding routine preventative use of allelopathic drugs or treatments. No anthelmintics, antibiotics or vaccines are administered unless it is to treat clinical conditions, following veterinary advice. The sheep flock has hitherto been managed as a closed unit, buying in only replacement rams so protection against sheep scab has been maintained without resorting to routine dipping. This closed flock policy cannot apply now, however, as in future the flock will have to be maintained by buying in replacement ewes.

The only routine treatments that are currently administered to livestock on this holding are for: -

- 1. **Protecting sheep from flystrike** in the late summer when past experience has shown that even clean, shorn animals are at risk amongst the scrubby vegetation that covers much of the land in question. The product used is 'Vetrazin', a long-acting, flumethrin-based pour-on. Any clinical cases of strike are dealt with using 'Spot-on', a deltamethrin pour-on product.
- 2. <u>Controlling the level of tick infestation</u> on cattle and sheep in the summer, using 'Spot-on'. On some sites at certain times the numbers of ticks visibly increase to levels that could begin to undermine the health of the livestock through loss of blood.

c) Clinical Treatments:

The following diseases have, in the past, presented problems for the health of animals on this holding. If they recur within the new system, veterinary treatment will need to be provided using allelopathic drugs:

1. New Forest Eye:

This bacterial disease is spread by flies that favour the areas of rough, scrubby and partly wooded vegetation, that frequently feature prominently on much of the land that this system utilizes. The threat that the disease poses varies from year to year and the most appropriate response seems to be clinically based since none of the approved methods for controlling flies are effective in these circumstances. Treatment is based on rapid diagnosis and administration of antibiotic ointment, often over several days. If this is done soon enough it appears to contain any large scale outbreak and only one or two individuals may be affected. Having had NFE, the individuals concerned appear to develop quite long lasting immunity. A range of antibiotics have been used over the years, none of which are completely efficacious; in the event of 'Orbenin', the vet's first choice drug, failing to cure the condition at least three other preparations are available as prescribed.

2. Mastitis:

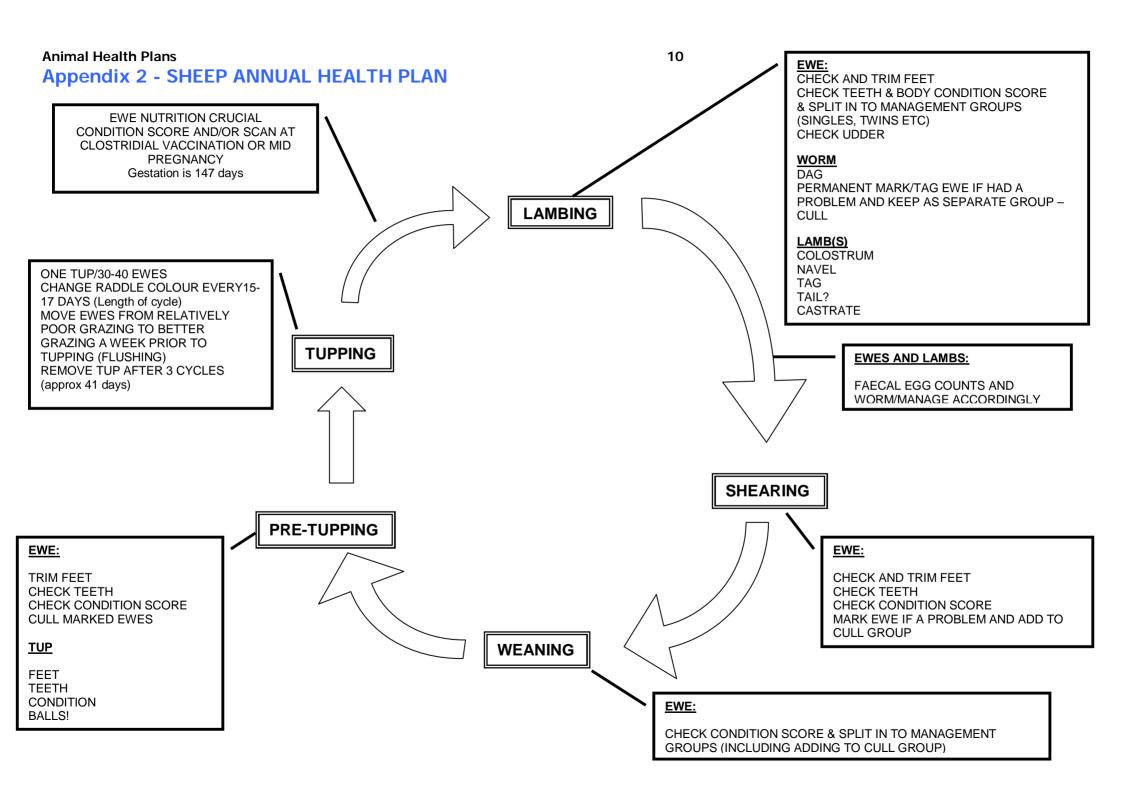
This disease is also spread by flies and so the means for controlling it are similar to NFE. With calving and lambing no longer being undertaken within the system, the threat of mastitis has been significantly reduced. In-calf heifers will be reared but they will be sold well in advance of parturition before the udder has 'bagged up' with milk, so that it is not prone to the leakage of fluid that might attract flies. The cows that are agisted will have calves at foot but these will be old enough to use all their dams' milk supply as it is produced and overfull udders will not be a problem other than in association with other conditions.

3. Foul-in-the Foot:

This is not a frequent problem but has occurred, mostly in housed cattle. The quickest and most humane treatment upon confirming the cause of the lameness is to treat with a prescribed anti-biotic according to veterinary advice. The move away from housing animals for the winter should reduce its occurrence.

4. Liver Fluke:

Most of the land in the system is well drained and represents no risk from this parasite. One or two sites are wetter (e.g. Gait Barrows and Hale Moss) and in the high risk year of 2000 this has resulted in confirmed cases of fluke amongst those animals that had been grazing them. Such cases were detected after some of the animals had begun to show marked deterioration in condition, was confirmed by faecal egg counts and treated with a flukicide before the condition could seriously compromise their welfare. Advice from my vet suggests that waiting until the eggs can be detected in the dung allows the animals to suffer significant damage from the parasite and prevention is a better option than clinical treatment on welfare grounds. It is therefore intended to try and pre-empt this risk by treating such animals prophylactically in years when the 'fluke forecast' is high. A specific flukicide such as 'Fasinex' will be the preferred choice of product



SHEEP ANNUAL HEALTH PLAN

KEY CONSIDERATIONS

- 1. **Lambing** overall policy:
- Outdoor lambing/drift lambing
- Low intervention lambing
- Indoor lambing
 - o Tasks:
 - Lambing system:
 - Cleaning and disinfection of individual pens
 - Colostrum intake
 - Fostering
 - Management of singles, twins, triplets, etc
 - Mismothering
 - Mothering-up/bonding
 - Navel disinfection
 - Penning system
 - Castration
 - Tail docking
 - Tagging
 - Possible health problems:
 - Clostridial diseases
 - Copper deficiency (swayback)
 - . E. coli mastitis
 - Encephalitis
 - Entropion
 - Enzootic abortion (Vaccination)
 - Hypocalcaemia
 - Hypomagnesaemia
 - ❖ Joint ill
 - Lamb dysentery
 - Lamb hypothermia
 - Lambing difficulties
 - Listeriosis
 - Louping ill
 - ❖ Navel ill
 - Pink eye (keratoconjunctivitis)
 - Pneumonia
 - Ruminal acidosis (follows gorging on concentrates)
 - Salmonellosis
 - Swayback Copper deficiency
 - Tick borne fever
 - Tick pyaemia
 - Toxoplasmosis (abortion)
 - Twin lamb disease
 - Vaginal Prolapse
 - Watery mouth
 - Isolation facilities and disease control
 - Control of zoonoses
 - Biosecurity controls, cleaning and disinfection post-lambing
 - Use, care and maintenance of equipment
 - Staffing and staff structure, communication
 - Turn out plan/policy when to turn out, where and which animals, e.g. singles, twins, triplets, and supplementary feeding

2. Grazing and/or housing

- Flock objectives (e.g. store or finished stock, breeding replacements to keep or sell)
- Conservation objectives
- Forage and mineral supplements
- Control of internal parasites:
 - Coccidiosis
 - Cryptosporidium
 - o Gid
 - o Liver Fluke
 - o Parasitic Gastro-enteritis
- Disease control:
 - o (E.coli)
 - o Copper deficiency
 - o Fly strike:
 - Use of pour-ons
 - Dagging
 - Dipping
 - General hazards to stock (litter, drowning, fences etc)
 - Grass staggers
 - Headfly
 - o Louping ill
 - Nutritional deficiencies
 - o Orf
 - o Photosensitisation
 - o Pneumonia
 - o Poisonous plants
 - o Scrapie
 - o Tick borne fever

3. Shearing

• When, where, how, who

4. Dipping

- Technique: dip, shower or spray system
- Where, when, who
- Sheep scab, tick, lice and fly strike control, (product choice, use and disposal)

5. Weaning/Pre-tupping

- When, where, how
- Ewe Condition score, teeth, feet, reason for cull?
- Ram Condition score, teeth, feet, reason for cull?

6. Flushing

Move ewes from relatively poor to better grazing a couple of weeks prior to tupping

7. Tupping

- Where and when
- Tup choice [breed, Scrapie resistance, high index, breeding policy, (i.e. breeding purebred replacements or cross breeding with a meat breed)]
- Ram/ewe ratio
- Use of raddles
- How long tups in, i.e. how many ewe cycles
- Use of teasers
- Care of rams post-tupping

8. Pregnancy

- Scanning or condition scoring and subsequent feeding management of groups
- Overall feeding regime
- Vaccinations:
 - o Clostridial diseases and pneumonia
 - o Enzootic abortion

KEY STOCK HUSBANDRY

1. Foot care plan

- Regular foot trimming
- Foot baths
- Establishment of clean flock on clean grazing(s)
- Foot rot (vaccination)
- Scald
- White line disease

2. Management of internal and external parasites

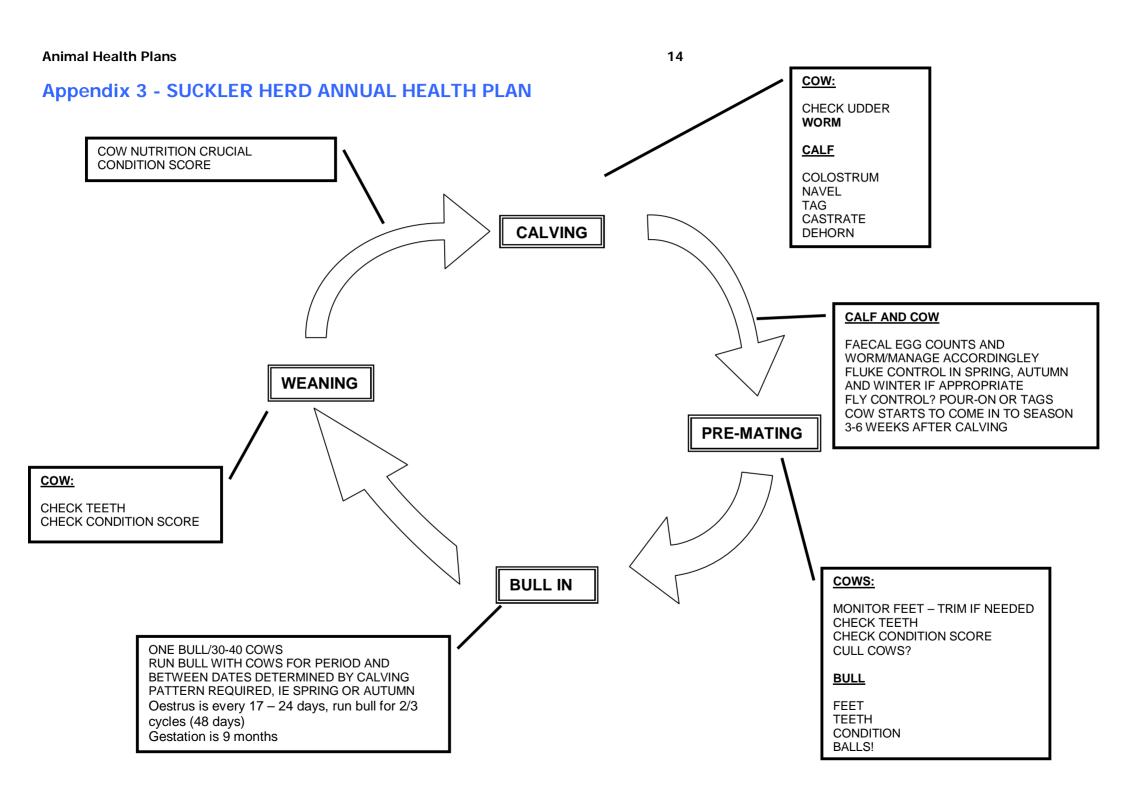
- Fluke
- Parasitic gastro enteritis, Nemotodirus and Haemonchus
- Sheep scab, tick, lice and fly strike control

3. Casualty animals and culling policy

4. Condition scoring

- Lambing
- Shearing/Weaning
- Early to mid-pregnancy (on Clostridial vaccination)

5. Scrapie testing



SUCKLER COW HERD ANNUAL HEALTH PLAN

KEY CONSIDERATIONS

- 1. **Calving** overall policy:
- Outdoor
- Indoor
 - o Tasks:
 - Calving system:
 - Penning system
 - Mothering-up/bonding
 - Colostrum intake
 - Navel disinfection
 - Cleaning and disinfection of individual pens
 - Castration
 - Disbudding
 - Tagging
 - Possible health problems:
 - Abortion (vaccination?)
 - Bovine Viral Diarrhoea
 - Brucellosis
 - Calf diarrhoea
 - Calf hypothermia
 - Calf pneumonia
 - Calf scours
 - Calving difficulties
 - E.coli mastitis
 - Endometritis
 - Fat cow syndrome
 - Hypocalcaemia
 - Hypomagnesaemia
 - ❖ IBR
 - ❖ Joint ill
 - Ketosis
 - Leptospirosis
 - ❖ Navel ill
 - Pink eye (related to feeding of silage)
 - Prolapsed uterus
 - Retained placenta
 - Ringworm
 - Salmonellosis
 - Isolation facilities and disease control
 - Control of zoonoses
 - Biosecurity controls
 - Use, care and maintenance of equipment
 - Staffing and staff structure, communication
 - Turn out plan/policy when to turn out, where and which animals, and supplementary feeding
 - Cleaning and disinfection post-calving

2. Grazing and/or housing

- Herd objectives (e.g. store or finished stock, breeding replacements to keep or sell)
- Conservation objectives
- Forage and mineral supplements
- Control of internal parasites:
 - o Cryptosporidiosis
 - o Liver Fluke
 - o Lungworm
 - Parasitic Gastro-enteritis
- Disease control:
 - o (E.coli)
 - Blackleg
 - o Bloat
 - o Fly control, (New Forest Eye, irritation to wounds and Summer mastitis)
 - Use of pour-ons
 - Tags
 - o Fog Fever
 - General hazards to stock (litter, drowning, fences etc)
 - o Grass staggers (Hypomagnesaemia)
 - o Hypocalcaemia
 - o Johnes disease
 - o Lice
 - o Louping ill
 - o Lumpy jaw
 - o Mange
 - o Nutritional deficiencies
 - Photosensitisation
 - o Pneumonia
 - o Poisonous plants
 - o Redwater Fever
 - o TE
 - Wooden tongue

3. Weaning

- When, where, how
- Cow Condition score, teeth, feet
- Bull Condition score, teeth, feet, reason for cull?

4. Bull in

- Where and when (spring or autumn calving)
- Cow feet, teeth, reason to cull/not breed
- Bull choice [breed, high index, breeding policy, (i.e. breeding purebred replacements or cross breeding with a meat breed)]
- Bull/cow ratio
- How long bulls in, i.e. how many cow cycles
- · Care of bulls afterwards

5. Pregnancy

- Pregnancy diagnosis and subsequent feeding management
- Vaccinations:
 - o Clostridial diseases and pneumonia

KEY STOCK HUSBANDRY

1. Foot care

- Regular inspection and foot trimming if appropriate, foot baths
- Foul-in-the foot
- Digital dermatitis
- Solar ulcer
- Abscess
- Laminitis

2. Casualty animals and culling policy

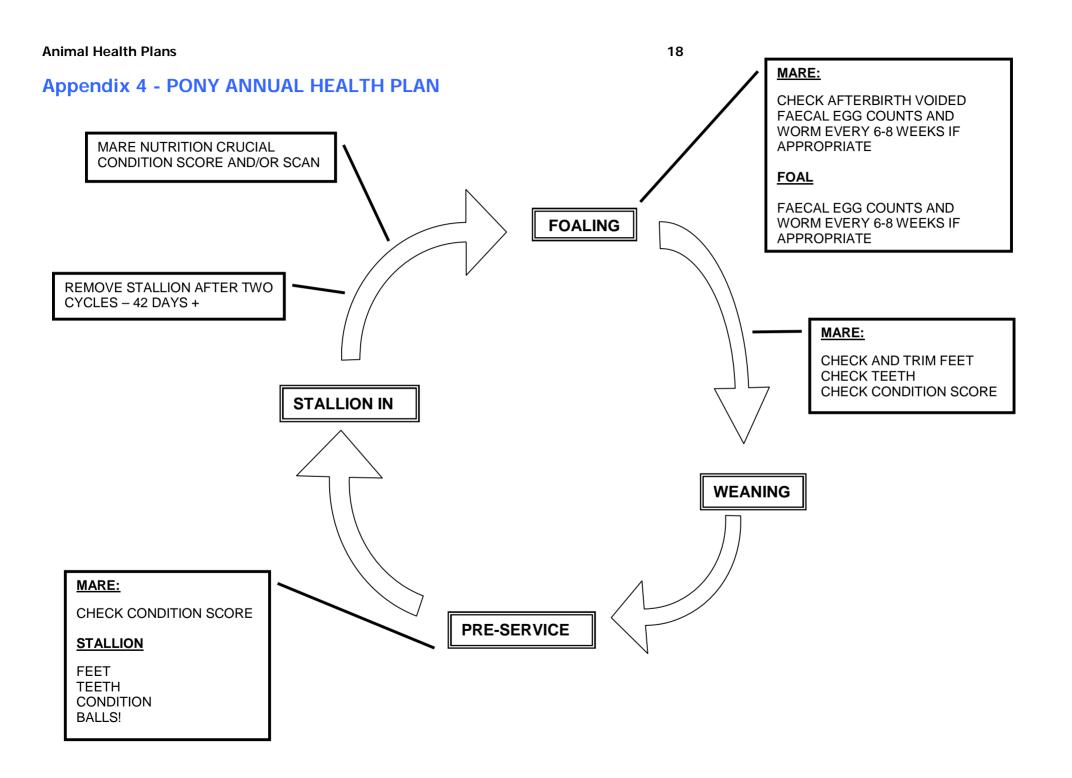
3. Condition scoring

- Calving
- Weaning
- Early to mid-pregnancy

4. (BSE)

5. Down cow management

- Food and water
- Shelter tarpaulin and straw bales to support, straw bedding
- Protection hurdles
- Turning
- Any treatments



PONY HERD ANNUAL HEALTH PLAN

KEY CONSIDERATIONS

- 1. **Foaling** overall policy:
- Outdoor
- Indoor
 - o Tasks:
 - Foaling system:
 - Penning system
 - Mothering-up/bonding
 - Colostrum intake
 - Navel disinfection
 - Cleaning and disinfection of individual pens
 - Castration
 - Possible health problems:
 - Foaling difficulties
 - Prolapsed uterus
 - Retention of afterbirth
 - Mastitis
 - Hypocalcaemia
 - Foal diarrhoea
 - ❖ Joint ill
 - Navel ill
 - Abortion
 - Hypothermia
 - Salmonellosis
 - Tetanus
 - (Equine influenza)
 - Isolation facilities and disease control
 - Control of zoonoses
 - Biosecurity controls
 - Use, care and maintenance of equipment
 - Staffing and staff structure, communication
 - Turn out plan/policy when to turn out, where and which animals, and supplementary feeding
 - Cleaning and disinfection post-foaling

2. Grazing

- Herd objectives (e.g. breeding replacements to keep or sell)
- Conservation objectives
- Forage and mineral supplements
- Control of internal parasites:
 - Parasitic Gastro-enteritis
- Disease control:
 - o Poisonous plants:
 - Yew (acute)
 - Ragwort (chronic)
 - o General hazards to ponies (litter, drowning, fences etc)
 - o Sweet itch

3. Weaning

- When, where, how
- · Mare Condition score, teeth, feet
- Stallion Condition score, teeth, feet

4. Stallion in

- Where and when
- Stallion/mare ratio
- How long stallion in
- Care of stallion afterwards

5. Pregnancy

- Pregnancy diagnosis and subsequent feeding management
- Vaccinations:
 - o Tetanus

KEY STOCK HUSBANDRY

1. Foot care

- Regular inspection and foot trimming if appropriate
- Abscess
- Laminitis

2. Casualty animals and culling policy

3. Condition scoring

- Foaling
- Weaning
- Early to mid-pregnancy
- 4. Colic
- 5. Teeth
- 6. Worm control