



First Name	Last Name
Veterinarian's Name	
Date of Visit	Producer OSHP #

FLOCK HEALTH MANAGEMENT ASSESSMENT FORM

This form is intended to introduce topics you may wish to discuss with your veterinarian. You **do not** need to use all of the management practices noted on the form in order to be certified with the program (e.g. organic producers are not required to use chemical de-wormers etc.).

Chapter and page references (Ch#: p#) to **The Introduction to Sheep Production** manual are given in each section to provide you with additional information. **It is not mandatory for you to comply with any of the recommendations given in the manual to be certified with the program.**

RED FLAGS are listed in each management area. You may wish to pay particular attention to those areas during the veterinary visit.

You can use the check boxes to note the practices you use & discuss with your vet.

The **Notes/Recommendations** section may be used by the Producer to comment on current flock management practices or by the Veterinarian to record recommendations.

UNDERSTANDING YOUR OPERATION:

Type of Operation: _____

Products Marketed & How: _____

Breeds Used: _____

Size of Breeding Flock: _____ Increasing / Decreasing / Status Quo? (Circle one)

Other Issues?: _____

MANAGEMENT AREA	NOTES / RECOMMENDATIONS
A. REPRODUCTIVE MANAGEMENT	
<p>Reproductive management of both ewes and rams is important in insuring you are achieving a high efficiency from each ram exposure - in terms of proportion of ewes lambing, number of lambs born per ewe and length of lambing season.</p> <p>RED FLAGS: Pregnancy / lambing rates are low; Lambing season is long; Prolificacy is low based on flock goals (See Productivity Calculations & Goals Form)</p>	
<p>EWES (Ch6:p80):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Pre-Breeding flushing (nutritional) (Ch6:p81, Ch7:p123) <input type="checkbox"/> Synchronization of estrus: <ul style="list-style-type: none"> <input type="checkbox"/> Hormonal (Ch6:p87-89) <input type="checkbox"/> Light manipulation (Ch6:p87-89) <input type="checkbox"/> Ram Effect (Ch6:p81) <input type="checkbox"/> Appropriate ram:ewe ratio (Ch6:p85) <input type="checkbox"/> Appropriate length of exposure (Ch6:p84) <input type="checkbox"/> Use of pregnancy diagnosis (Ch6:p83) Ultrasound / fetal counting Teaser ram with marker harness 	
<p>RAMS (Ch6:p80)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Appropriate pre-breeding management of rams (Ch6:p.85, Ch7:p127, Ch11:p197) <input type="checkbox"/> Breeding Soundness Examination (Ch5:p75, Ch6:p83-84) <input type="checkbox"/> Ram marker harness during breeding (Ch.6:p85) 	

MANAGEMENT AREA

NOTES / RECOMMENDATIONS

B. LAMBING TIME DISEASES OF EWES

PREVENTION OF PREGNANCY TOXAEMIA (PT)

RED FLAGS: You have had ewes die or show signs of PT in late pregnancy (Ch8:p158); You typically do not provide ewes in late pregnancy with grain or high quality forage

- Proper management of late gestation nutrition (Ch7:p124)
- Knowledge of the early detection and treatment of PT (Ch8:p158)

CONTROL OF ABORTION

RED FLAGS: Review this section if more than 5% of ewe aborted last breeding or if abortions occur as a cluster in time or with an increased number of stillbirths and weak lambs.

Note: Pregnant women should avoid handling ewes during lambing as many abortion diseases can infect humans and unborn babies.

- Appropriate management of abortions (Ch8: p161)
 - Methods for controlling abortions (Ch8:p160-2)
 - Vaccination (for which diseases?)
 - Feed additives
 - Biosecurity

PREVENTION OF VAGINAL PROLAPSE

RED FLAG: More than 2% of pregnant ewes develop this condition.

- Minimize risk factors (Ch7:p121, Ch8:p159)
- Management of prolapses
 - Monitor number of ewes that prolapse
 - Treatment, culling

C. IMPROVING SURVIVAL OF LAMBS

Many factors will contribute to your final lamb count including management of ewes before lambing, how diligent you are in checking and assisting lambing ewes, and the quality of care given to lambs after birth.

RED FLAGS: You routinely have more than 5% of lambs born dead (stillbirths)
Of those that are born alive, more than 5% of your lambs die before weaning
You routinely have an 'annoying' number of lambs being bottle fed
Poorer than expected pre-weaning lamb growth
Lambs routinely fail to thrive or die shortly after weaning

PRE- LAMBING MANAGEMENT

- Appropriate ewe management 3-6 weeks prior to 1st expected lambing date (Ch6: p95)
- Lambing supplies on hand (Ch6: p90 & 95)
- Housing management of close-up ewes
- Frequency of observation of close-up ewes

LAMBING MANAGEMENT

- Assistance of lambing (Ch6:p90)
- Check milk availability / quality
- Use of claiming pens (Ch6:p95)
- Processing for newborns (Ch6:p95-97)
- Colostrum management / amount (Ch6:p93, Ch7:p126)

PREVENTION & TREATMENT OF HYPOTHERMIA

/STARVATION OF LAMBS

(Ch6:p98-104)

- Management strategy for weak / chilled lambs (Ch6:p104)
- Minimize risk factors for chilling & starvation (Ch6:p95,98-99)

MANAGEMENT AREA

NOTES / RECOMMENDATIONS

FAILURE OF EWES TO RAISE LAMBS

- Do you routinely investigate and record the reasons ewes fail to raise their lamb(s)
(e.g. insufficient milk, mismothering, illness etc)
- Effective cross-fostering management (Ch.6:p97)
- Effective artificial rearing management
Milk replacer: type, delivery method, length of time (Ch7:p125)
Prevention of abomasal bloat

CONTROL OF MASTITIS

- Routine pre-breeding check of udders (Ch5:p74)
- Minimize risk factors
(Ch8:p163)
- Awareness of when during lactation mastitis typically occurs
- Treatment of mastitis (Ch8:p163)

INVESTIGATION OF LAMB DEATHS

- Do you routinely perform necropsy on lambs to determine approximate time of death (e.g. stillborn) and possible cause of death?
- Do you routinely record details of all lamb mortalities?
(Ch4:p65 + form provided)

OTHER LAMB DISEASES

Does your flock have significant losses from the following diseases? Are you aware of the signs, control and treatment of the following diseases?


- Neonatal diarrhea
(Ch8:p150)
- Pneumonia
(Ch8:p153)
- Urolithiasis (water belly)
(Ch8:p164)
- Soremouth / Orf / Contagious Ecthyma
(Ch8:p165)
- Pinkeye
(Ch8:p165)

MANAGEMENT OF WEANING

- Appropriate age at weaning
- Management before and after weaning
(Ch6:p110, Ch7:p126-127)

D. NUTRITIONAL DISEASES

NUTRITIONAL MANAGEMENT OF FLOCK

 **RED FLAGS: A sizable portion of the adult sheep in the flock are either over or under conditioned. Evidence of nutritional deficiencies such as poor reproductive performance & poor wool quality**

- Routine body condition scoring
(Ch7:p122 + Fact Sheet in Appendix)
- Sort & feed ewes based on body condition score
- Analyse nutrients of forages (Ch7:p117)
- Ration formulated by nutritionist (Ch7:p119)
- Implement a mineral/salt feeding program
(Ch7:p118 & 120)

MANAGEMENT AREA

NOTES / RECOMMENDATIONS

PREVENTION OF VITAMIN E SELENIUM DEFICIENCY (White Muscle Disease)

RED FLAGS: Your farm or the area where your forage is grown is low in soil Selenium (many areas of Ontario). You have had lambs showing typical signs of white Muscle Disease (Ch8:p151)

- Inject with vitamin E/selenium products
Ewes or Lambs?
- Add selenium or vitamin E to rations
Ewes or lambs / level?

PREVENTION OF COPPER TOXICITY

RED FLAG: Sudden death, particularly after a stressful event. Typically, more than one animal in the flock will be affected. Affected animals may show jaundice and dark urine (Chp8:p151)

- Minimize sources of copper from feed & environment
- Prevent molybdenum deficiency
- Test forages for copper routinely

PREVENTION OF CLOSTRIDIAL DISEASES (PULPY KIDNEY; ENTEROTOXAEMIA; TETANUS etc)

RED FLAGS: Sudden death of previously healthy lambs most commonly between 2-12 weeks or in weaned lambs (Pulpy Kidney Ch8:p150); Sudden onset of bloody diarrhea in lambs typically under 3 weeks of age (Enteritis Ch8.p150); Limb stiffness or stilted gait in animal with wound or after castration or docking of lambs; (Tetanus Ch8:p155)

- Vaccination program (Ch8:p139-140)
Product used?
Primary series, booster series / timing?
Age of animals?
- Nutritional control measures (Ch8:p150)

PREVENTION OF GRAIN OVERLOAD (LACTIC ACIDOSIS) AND BLOAT

RED FLAGS: Lambs on grain that go off feed, laminitis (sore feet), foul-smelling diarrhea. Deaths due to bloat. Liver abscesses at slaughter. (Grain Overload & Bloat Ch8:p149)

- Proper feeding / bunk management .
- Gradual change in feedlot rations.
- Avoidance of feeds associated with bloat.

E. PARASITIC DISEASES

CONTROL OF INTERNAL PARASITES

RED FLAGS: Poor lamb growth, may see diarrhea. (Ch8:p145)
All sheep operations will benefit from using some form of parasite control

See Ch8:p142-145

- Anthelmintic use (including organic treatments):
 - Timing of treatment
 - Drugs used, route, dosage -method of calculation
 - Evidence of anthelmintic resistance?
- Other control measures:
 - Monitoring of parasite burden - fecal egg count
 - Pasture management / rotation
 - Grazing with other species

CONTROL OF EXTERNAL PARASITES

RED FLAGS: Scratching, rubbing of wool, poor growth (keds, lice, mange); Evidence of fly strike, maggots & soiled wool; Nasal discharge and irritation (Nose bots)

See Ch8:p146

- Control products used (including organic)
- Pasture management (shelter, fly control)
- Tail docking and shearing

MANAGEMENT AREA

NOTES / RECOMMENDATIONS

CONTROL OF COCCIDIOSIS

RED FLAG: Typically affects lambs most severely. One or several lambs within one pen develop diarrhea (possibly bloody), poor growth, 2+ or greater oocysts on faecal examination

See Ch8:p145 & 150

- Prevent faecal contamination of feed and water
- Coccidiostats
- Type, dosage, concentration, delivery method, to whom

PREVENTION OF DOG TAPEWORM DAMAGE

RED FLAG: Lamb livers or entire carcasses condemned at slaughter due to cysts, larval tracts or scars. (*Cysticercus tenuicollis* / *Taenia hydatigena*; *Cysticercus ovis* / *Taenia ovis*)

- Farm dogs routinely treated for tapeworms?
- Farm dogs allow to eat uncooked sheep carcasses/offal?

F. PREDATOR LOSSES

PREDATOR CONTROL

RED FLAG: History of sheep loss from predation

See Ch10:p187-195

- Guard animals
- Electric fences
- Other control methods

G. DISEASES CAUSING LAMENESS

CONTROLLING LAMENESS

RED FLAGS: Lameness in more than 5% of sheep (Foot diseases: foot scald; foot abscesses; contagious ovine footrot; laminitis)

See Ch8:p157 & Ch9:p185-186

- Diagnosis of cause of lameness
- Routinely trim and examine feet
- Management of environment (pasture, yards)
- Culling
 - Treatment of lameness / contagious footrot
 - Pasture management
 - Foot bathing
 - Equipment, frequency, duration, culling
 - Treatment used (zinc sulphate, formaldehyde) & concentration
 - Other: Antibiotics; vaccination

H. CONTROL OF DISEASES WHICH CAUSE WASTING IN ADULT SHEEP

INVESTIGATION OF CHRONIC WASTING DISEASES

Progressive, chronic wasting is a primary sign of many important diseases found in adult sheep. Sheep should be routinely check for body condition score. An adult animal suffering from wasting is unusually thin in comparison to its cohorts, considering ration and stage of production. It is important to investigate causes for chronically thin sheep, as they may be an indication of a costly sub-clinical disease in your flock. Monitoring through necropsy of thin adults by your veterinarian is the most effective ways of identifying the cause of wasting.

DENTAL / ORAL DISEASE

RED FLAG: Typically one animal is affected at a time. Thin adults have gingivitis; incisor loss, pre-molar loss; osteomyelitis, Other diseases of the jaw: Lumpy jaw, cheek abscesses (Ch8:p154)

- Routinely check thin adults for dental problems
- Minimize risks (appropriate feed)

MANAGEMENT AREA

NOTES / RECOMMENDATIONS

CONTROL OF CASEOUS LYMPHADENITIS (CLA)

RED FLAG: A common disease that mostly manifests as abscesses in the head and neck region however, abscesses in the lungs and internal organs are also common. Caused by infection with *Corynebacterium pseudotuberculosis*. Internally affected animals may present with chronic wasting, respiratory distress or be asymptomatic (Ch8:p154).

- Vaccination program
- Isolation
- Culling
- Shearing biosecurity

CONTROL OF MAEDI VISNA (OVINE PROGRESSIVE PNEUMONIA)

RED FLAG: Hard bag mastitis; progressive respiratory disease in adult sheep (Ch8:p.153 & 156)

- Control program (blood testing & culling)
- Biosecurity

CONTROL OF JOHNE'S DISEASE (Ovine Paratuberculosis)

RED FLAG: Progressive weight loss of adult sheep, may see diarrhea (Ch8:p155)

- Environmental control
- Serology / fecal culture + culling
- Prevention of infection of young stock

SCRAPIE STATUS OF FLOCK

RED FLAG: Neurological disease or wasting of sheep generally 2 years or older (Ch8:p156)

Discuss the following with your vet:

- Epidemiology of disease
- Genetics of the disease
- Regulations regarding control / reportable disease
- Voluntary Scrapie Flock Certification Program

Description of Pathways 1, 2, 3

- Monitoring of mature deads
- Genetic testing
- Third eyelid testing

I. SHEEP MANAGEMENT TOOLS

HANDLING FACILITIES (Ch2:p16)

Discussion of the need for handling facilities
Crowding pens; chute; drafting gate; head gate
Lamb cradle; footbath; stock dog; stanchion

CARCASS QUALITY / SAFETY

- Inject sheep subcutaneous if possible and always in neck
- Muzzle dogs when loading lambs for market.
- Always record treatments and follow withdrawals.

RECORD KEEPING (Ch4:p57)

- National ID program (Ch4:p58)
- Other methods of identification (Ch4:p58-61)
- Treatment records (COOFS or equivalent)

Current method(s) of information recording

- Lambing diary
- Individual cards
- Computer program
- Sheep Flock Improvement Program (Ch5:p76)
- Analysis of performance

Make a summary of recommendations on the form Flock Health Management Summary Report (FHM-SUM). A copy of this work sheet should be retained by both the flock veterinarian and the flock manager for a minimum of one year.