Limited Versus Intensive Management of Sheep & Goats

Jodie Pennington and Helen Swartz
Lincoln University,
Neosho and Jefferson City, MO

Husbandry defined---varies with management level

• The cultivation of crops and the breeding and raising of livestock.
• The application of scientific principles to animal breeding.
• Good careful management of resources.
• Careful management of resources.
• A combination of observations, actions, and efficient and effective utilization of resources (animals).

Prevention IS KEY-
Either level of management can be profitable

Three Major Factors Affecting Profitability of Sheep and Goats

• Feed prices—try to minimize purchased grain and maximize good, high quality forage: $45 per doe/kid(s) versus $85 per doe/kid(s)—try to maximize pasture
• % Kid or lamb crop sold—essential to keep as many animals alive as possible (parasites and predators are main problems)
• Market prices—$$ per cwt sold; try to hit high markets (used U.S. dollars and numbers)
• All factors can double/triple profit per doe/kid(s)

Budget for Goats—Return to Land, Labor, and capital—used U.S. dollars/numbers

30 does, 1 buck, 5.0% adult death loss, $2.00/lb for kids, 170% kid group, $43.79 feed costs, 20% doe replacement, 33% buck replacement, 5 acres

<table>
<thead>
<tr>
<th>Change</th>
<th>$2/lb—start</th>
<th>&gt;$40 feed costs</th>
<th>130% kid crop</th>
<th>$1.70/lb for kids sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returns With Good Mgt</td>
<td>$4,381-</td>
<td>$3,181 Change $1200</td>
<td>$1,842 Change $1339</td>
<td>$897 Change $945</td>
</tr>
<tr>
<td>300 does@ $43,810</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example of Intensive Management

• 20 Boer does, Boer buck, registered (dairy??)
• 1 dog; limited AI; Kid from Dec-Mar, sells show market wethers at 40-60 lbs for $300
• Barn, panel fencing, waterers, heat lamps, individual pens, assist with kidding as needed, bottle feed colostrum, dip navels, give SE
• Feed: Flush before breeding, feed grain to keep goats in good flesh, pasture & hay
• Sees daily; vaccinate for CDT 2x/yr, sore mouth, maybe repro disease; deworm 4x/year plus FAMACHA; trim hooves 2x/yr; cleans CLs
Example of Limited Management
- 600 crossbred goats, commercial; Boer sire
- Feed: browse, pasture, and hay in winter
- 10 dogs, breed for Mar-April kids
- Old barbed wire fences (previously for cattle)
- Vaccinate for CDT once yearly
- No parasite control
- Frequent observations to feed dogs, cull “sickly” goats, sell kids when 45-65 lbs and price is good

SANITATION—essential for all management and key to prevention
- Pastures
- Housing
- Feed
- Water
- Equipment
- Transportation

Selection and Culling—differs with type of management
- Size of operation—either level
- Time available—may work off farm
- Level of production—do you sell breeding stock
- Goals
- Level of expertise
- Limited management may cull all problems in their system, thus selecting for effective animals in their system; intensive mgt may do the opposite (babies animals) and selects animals that need more intensive management or care

Cull Health Problems—if you paid $400 or $4000 for a new male, would you cull him for these?
- Pneumonia??
- Udder Problems?? Three teats??
- Structural Problems
- Poor Breeder
- Difficult Breeding Kids
- Hard Keepers
- Drastic Changes, ie sickly, needs frequent deworming, jumps over the fence, pet

Selection
- Muscle or Milk is not Everything
- Structurally Sound
- Good Mothers
- Easy Keepers?
- Replacements from Top Does?
- Select the Best; Cull the Rest
- Cull Hard and Cull Often
- Plan for Years Ahead and Future Problems

Culling is critical if commercial...
1. Cull sheep and goats that don’t fit your system
2. If you want a commercial herd, don’t select replacements that have been fed primarily on grain, feed to maximize forages (show is exception)
3. Cull for disposition (jumps fence=cull)
4. Cull for parasite problems
5. Cull for poor mothering, milk
6. Cull hard breeders
7. Cull for conformation (legs, size?, teeth, teats, wool?, etc)
Management Practices—all vary with level of management

- vaccinations—few vs many
- hoof maintenance—none or little vs routine
- castration?—both neither
- debudding or dehorning?—varies with species
- treatments—little vs routine
- parturition—assist or not—big differences
- identification—none or little vs all
- records—little vs extensive; all need to record significant diseases, events, etc

Hoof Maintenance—example of how a practice can vary with level of management

- observation—daily vs weekly or monthly
- what is normal? Varies with your level of management; some hoof growth is normal
- trim as necessary or as needed to walk
- selection—trim or cull bad hoofed animals
- sanitation—don’t spread foot rot; need for all trimmings, other practices
- think of western sheep where herded 1x/yr

Plan to Use Forages You Have

- soil test and fertilize & lime accordingly
- plan for different seasons, plan for a drought, consider over-seeding with legumes, match kidding to peak forage production
- have browse available (accessible)
- cut excess forage for hay as a reserve for winter or a drought
- monitor body condition score (may not score, just observe) and supplement as needed
- degree of management for above items may vary with management intensity

Utilize rotational grazing with intensive management—to improve forage utilization

- to manage forage quality to meet animal nutritional needs
- to maintain pasture condition/health
- to manage internal parasite levels
- to observe for problems with internal parasites
- limited mgmt is usually continuous grazing

Keys to Preventative Health

- good nutrition—feed always available
- minimize stress
- vaccinate—CDT vs more vaccines
- biosecurity—all need, don’t bring in disease
- control internal parasites—deworm often or as needed, or cull when wormy looking
- cull
Vaccinations

- *Clostridium perfringens* C&D & tetanus (CDT)
  - Most important
  - Only one with limited management
- Other disease to consider to vaccinate
  - Caseous lymphadenitis
  - Soremouth
  - Footrot
  - Abortion causing diseases

Production Management Practices for Commercial (All) Producers

- Buy healthy, sound animals to start
- Consider start-up costs plus some when starting - expect to cull some
- Maximize forages; minimize grain use
- Control parasites and predators
- Need vaccination program - CDT
- Emphasize male genetics
- Consider having cattle and goats or sheep and utilizing multi-species grazing

Prevention/ Sanitation Is Always The Key

Example of Intensive Management

- 20 Boer does, Boer buck, registered (dairy??)
- 1 dog; limited AI; Kid from Dec-Mar, sells show market wethers at 40-60 lbs for $300
- Barn, panel fencing, waterers, heat lamps, individual pens, assist with kidding as needed, bottle feed colostrum, dip navels, give SE
- Feed: Flush before breeding, feed grain to keep goats in good flesh, pasture & hay
- Sees daily; vaccinate for CDT 2x/yr, sore mouth, maybe reprod disease; deworm 4x/year plus FAMACHA; trim hooves 2x/yr; cleans CLs

Example of Limited Management

- 600 crossbred goats, commercial; Boer sire
- Feed: browse, pasture, and hay in winter
- 10 dogs, breed for Mar-April kids
- Old barbed wire fences (previously for cattle)
- Vaccinate for CDT once yearly
- No parasite control
- Frequent observations to feed dogs, cull “sickly” goats, sell kids when 45-65 lbs and price is good

Example of Limited Management

- 60 crossbred hair sheep
- 2 dogs, mostly woven wire, some barbed & electric wire, breed for lambing 2x (1/2)/yr
- Feed: mixed pasture, browse, and hay; limited grain if ewes are thin or at breeding
- Vaccinate for CDT
- Process twice for year: weigh and check body condition, do FAMACHA score, worm as needed with Prohibit, check teeth
- Cull as needed, sell weaned twice per year
Summary: Management for All Levels

- Goats/sheep are naturally healthy; your management can have either good or bad effects on them; keep records of problems
- **Cull poor “doers”**
- Minimize stress; PREVENT PROBLEMS
- Provide adequate nutrition
- Avoid extensive parasitism, predation
- Conduct vaccination program (CDT)
- Isolate new animals coming into herd
- Provide a sound environment—may need shade and wind breaks; guard animal(s)