1) Introduction

Hiawatha Valley Resource Conservation and Development (RC&D) has been fortunate to be involved in several projects demonstrating the use of livestock to provide ecological services such as controlling terrestrial invasive or otherwise undesirable plants. Most fortunately, we have had the opportunity to experience these projects with the involvement of many very interested and enthusiastic partners. These include livestock owners/grazers, landowners, public land managers, and resource professionals.

We have learned that an enterprise such as this differs significantly from dairy or meat livestock enterprises. Through a grant from AgStar Financial, and contributions from numerous others, we have prepared this document to share what we have learned or gathered to date. The intent is to share the information freely and in a manner that will be of help to a person interested in starting such an enterprise.

Special appreciation is paid to Karl Hakanson, University of Minnesota Extension Educator - Hennepin County. Karl has enthusiastically taken on a leadership role in this arena, and is also the Ecological Services Livestock Network coordinator for the Sustainable Farming Association of Minnesota. This network is an excellent opportunity for anyone considering this type of enterprise. Their website with SFA of MN has additional resources on this topic. More information can be located at: [http://www.sfa-mn.org/ecological-service-livestock-network/](http://www.sfa-mn.org/ecological-service-livestock-network/)

Hiawatha Valley RC&D had a great deal of assistance in compiling this information. Through a grant from The AgStar Fund for Rural America it was possible to gather useful information from related grants from the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR) and a project funded by the Minnesota Department of Agriculture Sustainable Agriculture Demonstration Grant Program. Key contributors and reviewers of this document include:

- John Beckwith, executive director, Hiawatha Valley RC&D
- Karl Hakanson, extension educator – Hennepin County, University of Minnesota
- Kent Solberg, livestock and grazing specialist, Sustainable Farming Association
- Jake Langeslag, owner and goat wrangler, Goat Dispatch LLC

2) Use of this document

There are many business planning tools available to you as an entrepreneur. We felt AgPlan offered an excellent format and guidance to the user. Our intention is to build on the strength of this tool by offering additional Tips, Resources, and Samples. To keep it as simple as we can for you as a user, we will simply provide “Additional Considerations” for each major heading. These additional considerations will provide an opportunity to share information specific for a start-up Ecological Service Livestock Enterprise. We hope you find it useful.
3) About AgPlan from: [https://agplan.umn.edu](https://agplan.umn.edu)

AgPlan is powerful website developed to help rural businesses develop a business plan. AgPlan is free of charge for anyone to use individually or in educational programs. AgPlan is designed to provide customized assistance to different types of rural businesses. When you enter the site, you will be able to select your business type from the following choices:

- Ag - Commodity
- Ag - Value-Added
- Organic Transition
- Personal Plan
- Small Business

Each business type has an outline designed specifically for that particular type of business, tips or questions that help you develop each section of the plan, sample business plans, and links to additional resources for each section of the plan.

AgPlan is designed to help business owners work with an educator or consultant while developing a business plan. You can give access to your business plan to the reviewers of your choice and AgPlan will facilitate interaction with them. AgPlan Overview:

AgPlan will assist you to develop a business plan that demonstrates a well thought-out venture that is documented in such a way that it can be shared with others, and used to evaluate your own level of success. By considering the seven sections along with the subsections listed below you will have thought through many of the strengths and potential pitfalls you will face.
For each section and subsection, AgPlan includes internal and external links in the following categories:

- Tips
- Resources
- Samples
- Comments

There is a wealth of information and guidance within this tool. Building upon this tool we set out to provide more specific considerations for anyone interested in ecological services livestock.
4) **Additional Considerations for an Ecological Services Livestock Enterprise:**

**Section 1: Cover Page**

Additional Considerations:

**Section 2: Executive Summary**

Additional Considerations:

1) **Tip:** As you set out on your planning process there are some skills and aptitudes that you will want within yourself, or on your team. These include animal husbandry, people skills, ecological knowledge, mechanical aptitude, entrepreneurship, time management, and interest. You will also want “dealing with media” skills, as goats are so charismatic!

2) **Tip:** There are new farmer programs for folks newly venturing into agriculture. Some examples include the SFA Deep Roots Farmer Development Program and the Land Stewardship Project Farm Beginnings Program. Check for programs available to you.

**Section 3: Business Description**

Additional Considerations:

1) A Paradigm Shift: Using Grazing as a Means to Achieve Ecological and Agricultural Objectives – Annotated bibliography. Thomforde 2013 (here)

2) Using Goats to Control Invasive Plants – Cherrie Nolden, Southwest Badger Whole Farm Planning Workshop for Landowners. February 7, 2015 (here)

3) **Tip:** Get involved in organizations with connections to your livestock type and networks such as the Sustainable Farming Association of MN Ecological Service Grazing Network. A great deal can be learned rubbing elbows with like-minded folk.

4) **Tip:** Consider logistics, and how they fit into your profit potential, including: hours/week; travel time, service area, how many sites can one manage, etc.
Section 4: Operations

Additional Considerations:

1) Targeted Grazing: A Natural Approach to Vegetation Management and Landscape Enhancement – American Sheep Industry Association (here)
2) USDA-NRCS National Range and Pasture Handbook (here)
3) USDA-NRCS Minnesota Practice 528, Biological Brush Management Implementation Guide (here)
4) USDA-NRCS Minnesota Practice 528, Biological Herbaceous Weed Control (here)
5) USDA-NRCS Grazing Plan for Prescribed Grazing Conservation Practice (here)
6) Sources of Electric Netting for Goat Enclosures

   Known sources:
   - Farm Tek  http://www.farmtek.com/farm/supplies/home
   - Kencove  http://www.kencove.com/
   - Max-Flex  http://www.maxflex.com/
   - Premier 1  https://www.premier1supplies.com/
   - Zareba  http://www.zarebasystems.com/

   If you know of, or are a supplier of electric netting products and would like to be added to this vendor list please contact john@minnesotarcd.org

7) Tip: Many municipalities have ordinances regarding grazing within their jurisdictions. Be sure to check with any localities you may have an interest in grazing within. It may take a lobbying effort to make it possible.
8) Tip: A veterinarian with expertise in the livestock type you are planning for can be very important. Not every community has a “goat doctor” so check around. But also plan on doing much of the work yourself if you’re to be profitable.
9) Tip: Fence materials - don’t skip on quality. Fencing will be your primary management tool, especially risk management.
10) Some equipment and resource needs to consider owning, renting, sharing, or contracting:

   - Truck/Van
   - Trailer
   - Fencing
   - Fencer
   - Fencing tools
   - Corral Panels
   - Gates
   - Watering tank
   - Salt and Minerals
   - Mechanic tools
   - Carpenter tools
   - Facilities – huts/shelters
   - Land
   - Buildings
   - Feed storage and handling
   - Manure management
   - Water
   - Winter bedding

11) Bid Specifications: When working with public lands (land owned and managed by local, state or federal government) you may be presented with bid specifications required to compete for the project. These bid specification examples are also helpful for developing any bid for your services because they contain many ideas that should be considered in your agreements.
12) Contracts and agreements: Whether it is a formal contract or a hand-shake, it is well served to have each party clearly understand what will be happening. Sample contracts may be available from public land managers or grant managers. See a sample here.
13) Tip: Have plan/protocols for livestock mortalities, and sick and injured livestock (euthanasia plan - especially if working in a public area). This is the unpleasant side of a livestock enterprise. Best to work out these details in advance.
Section 5: Marketing Plan

Additional Considerations:

1) Tip: Public land managers at all levels are considering the use of livestock for vegetative control over the use of chemicals or mechanical controls. Schedule a visit and learn what’s happening in your area.

2) Tip: Right of ways may be an opportunity in your area. There is a Right-of-way Stewardship Council that may be of interest to you at: http://www.rowstewardship.org/

3) Tip: A website is very helpful in today’s world to get the word out.

4) Tip: There are many innovative marketing scenarios being used to market. Will you have meat products? Will you rent herds out for others to care for? Can you market to a crowd with entertainment aspects of the critters? There’s room for creativity!

Section 6: Management & Organization

Additional Considerations:

Section 7: Financial Plan

Additional Considerations:

1) Tip: Grazing on public lands may have unique insurance requirements. Have a discussion with your agent early in the planning process.

2) Tip: Pricing is one of the more challenging issues you will deal with in your business plan. You are in the business to make money! This article discusses some of the items of consideration. (here)

3) While your purchase, rent, borrowing needs will be unique to your operation, we have also included a budget items list for you to use as a starting place. A copy is included on the next page, and a downloadable file is available (here).
# Worksheet for Determining Costs and Profitability

### Year: ________________

<table>
<thead>
<tr>
<th>Fixed Cost</th>
<th>Initial Cost</th>
<th>Life Span</th>
<th>Annual Cost</th>
<th>Variable Costs</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock (New &amp; Replacement)</td>
<td></td>
<td></td>
<td></td>
<td>Labor</td>
<td></td>
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<tr>
<td>Pasture/Lots</td>
<td></td>
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<td></td>
<td>Management</td>
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<td>Winter housing</td>
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<td></td>
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<td>Herdsmanship</td>
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<tr>
<td>Buildings</td>
<td></td>
<td></td>
<td></td>
<td>Moving animals</td>
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<tr>
<td>Truck</td>
<td></td>
<td></td>
<td></td>
<td>Fence setup</td>
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<tr>
<td>Trailer</td>
<td></td>
<td></td>
<td></td>
<td>Feeding operations</td>
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<td>Corral Panels</td>
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<td>Gates</td>
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<td>Watering Tank - HQ</td>
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<tr>
<td>Feed storage and handling</td>
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<td>Feed and water</td>
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<tr>
<td>Manure management</td>
<td></td>
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<td>Salt and minerals</td>
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<tr>
<td>Water</td>
<td></td>
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<td></td>
<td>Supplemental feed</td>
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<tr>
<td>Mechanic tools</td>
<td></td>
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<td>Winter feed</td>
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<tr>
<td>Carpentry tools</td>
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<td></td>
<td></td>
<td>Water supply</td>
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<tr>
<td>Guard Animal(s)</td>
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</table>

**Grazing Site Equipment**

<table>
<thead>
<tr>
<th>Variable Costs</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overhead Management Costs</td>
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<td></td>
<td>Expected Revenues</td>
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<tr>
<td>Land taxes</td>
<td></td>
<td></td>
<td>Contracted grazing</td>
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<td>Land rental</td>
<td></td>
<td></td>
<td>Animal rental</td>
</tr>
<tr>
<td>Insurance</td>
<td></td>
<td></td>
<td>Meat sales</td>
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<tr>
<td>Record keeping</td>
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<td></td>
<td>Other</td>
</tr>
<tr>
<td>Veterinary expenses</td>
<td></td>
<td></td>
<td>Total Revenue=</td>
</tr>
</tbody>
</table>

**Total/Annual Fixed Costs**: 0

**Total/Annual Variable Costs**: 0

**Total Annual Costs (Fixed Plus Variable)**: 0