



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

Big Stone National Wildlife Refuge
44843 County Road 19
Odessa, Minnesota 56276



Date: January 19, 2023
To: Interested Cattle Grazers
Subject: 2023 Refuge Grazing Units

Big Stone National Wildlife Refuge will be allowing cattle grazing on two units of the Refuge beginning in 2023. Grazing unit descriptions, requirements, and maps follow below along with a bid application. Cooperators are responsible for following all terms and conditions identified in the requirements and regulations.

Permittees will be selected based on receipt of sealed high ranked bid for each of the grazing units. Sealed bids are due at the Refuge office no later than **4:00 pm, February 8th, 2023**. A box will be placed in front of the office for bid collection after hours. Bids may also be mailed to the Refuge office.

Please call Refuge Biologist Brandon Semel (320) 273-2191 (x. 2508) or Assistant Project Leader Andy Stetter (x. 2501) if you have any questions about the units or bidding process.

Sincerely,

Brandon Semel
Refuge Biologist

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Conservation Grazing Plan
Big Stone National Wildlife Refuge

44843 County Road 19
Odessa, Minnesota 56276

This document outlines the objectives for grazing management for two grazing units on Big Stone National Wildlife Refuge (NWR): South Prairie 2 and South Prairie 3 and how producers can submit bids for grazing on these units. The process has changed considerably from past years, so please read everything carefully. The aim of this new process is to allow considerable flexibility for a wide range of producer capabilities in sites with limited fencing infrastructure and access to water.

In summary, using the information provided below, we are asking potential bidders to submit their own grazing plans that will meet the management objectives for the units described below. Submitted bids will be evaluated by refuge staff and scored using the attached ranking system (pages 15-16). The bidder with the highest collective score will be awarded the grazing contract for the unit on which they bid. In other words, the bid will not necessarily go to the highest dollar/AUM amount, but rather to the producer who is best able to help us meet grassland management goals. Scoring criteria are provided below in order to make this process as transparent as possible. Potential bidders are welcome to contact the Refuge Biologist Brandon Semel (brandon_semel@fws.gov or (320) 808-9470) prior to submitting a bid. Bids are due by email or in the drop box at Big Stone NWR headquarters in Odessa at 4:00 pm on Wednesday, February 8.

***The Refuge reserves the right to reject any and all bids that do not meet management goals (*i.e.*, if no bids meet minimum management objectives, no awards will be given). ***

Successful bids may still require modification as changes occur in the plant communities, weather conditions, and soil health; as we learn more about the interaction of the livestock and the plant communities on the site; and as other factors influence the site. In person consultations will be expected each year of the contract to evaluate the success of the previous year's graze and to make any necessary changes to the special use permit (SUP) for the following year.

OBJECTIVES:

- Utilize grazing as a wildlife habitat/plant community management tool.
- Reduce the density of smooth brome on the unit while invigorating native species and native species diversity.
- Create a more diversified habitat structure through varying grazing intensities (intensity may range from light to heavy) and timings.

- Implement rest and grazing to create positive disturbance for improving the grassland health, diversity, and wildlife habitat.
- Implement a disturbance/rest cycle to create a more diversified landscape, which will improve the grassland health as well as the habitat quality for a wider breadth of grassland wildlife species (such as grassland birds).
- Grazing will be utilized on site to create more heterogeneity on the landscape to increase the wildlife habitat available to a wider array of species. Light intensity grazing will be utilized to manipulate the cover, to promote the restored native prairie found on the site, and to limit woody species invasion.

BID PROCESS:

Producer-developed grazing plans will be evaluated by refuge staff and scored using the attached ranking system (pages 15-16). The bidder with the highest collective score will be awarded the grazing contract. Bid costs are based on Animal Unit Months (AUMs; see below for how these are calculated). Bids that are deemed to have the most negative impact on smooth brome (a non-native, cool-season grass) and that create the most variable habitat structure with the least negative impact on native prairie will rank highest.

We are bidding out 400 AUMs for South Prairie 2 and 410 AUMs for South Prairie 3. This is about 1 AUM per grassland acre. Total AUMs used will be determined for billing and management purposes at the end of each grazing season. For reference, average pastureland rental rates in northwest SD were \$16/AUM (<https://extension.sdstate.edu/sites/default/files/2022-05/P-00117-2022.pdf>) and \$37/AUM for cropland/pasture rental in Big Stone/Lac qui Parle counties in MN (<https://extension.umn.edu/farmland-rent-and-economics/pastureland-rental-rates>).

If site conditions, livestock numbers, or average animal weights change, the planned length of the grazing periods may need to change as well. By using AUMs, we can ensure that producers are only billed for the amount of forage that their cattle consume. AUMs are based on animal units (AUs; Table 1).

Table 1. Animal units (AUs) are based on the following average animal weights.

Kind/Class	Ave. Weight	AUs
Mature Cow	1,000 lbs.	1.0
Cow/Calf pair	1,200 lbs.	1.2
Bull (mature)	1,500 lbs.	1.5
Yearling	700 lbs.	0.7
Weaned Calf	500 lbs.	0.5

One AUM is based on the amount of feed that an AU consumes in one month. To calculate AUMs for your herd, use the following table. Fill in the # of Kind/Class and # of Days columns then multiply and divide across rows as shown. Add up the total AUMs down the final column:

Table 2. Animal unit months (AUMs) can be calculated using this table.

Kind/Class	# of Kind/Class	Multiply	AUs	Multiply	# of Days	Divide by 30 Days	AUMs
Mature Cow		x	1.0	x		/30	
Cow/Calf Pair		x	1.2	x		/30	
Bull (Mature)		x	1.5	x		/30	
Yearling		x	0.7	x		/30	
Weaned Calf		x	0.5	x		/30	
Add all boxes in AUM column for total AUMs							

The Refuge reserves the right to reject any and all bids that do not meet management goals (*i.e.*, if no bids meet minimal management objectives, no awards will be given). Our goal is to determine the winning bids by February 10.

OTHER CONSIDERATIONS:

Custom Grazers

Custom grazers must provide additional documentation including: 1) evidence to support that they have the capacity/experience to secure the number of cattle needed to fulfill their bid, 2) written documentation that they are solely responsible for and have the capacity/resources necessary for moving cattle on and off the site according to the timelines in the SUP (including start and stop dates and if excessive grazing thresholds are met and cattle need to move earlier than expected), and 3) written documentation that they are responsible for any other actions/offenses taken by cattle from the time they are on the unit until they come off the unit.

Fencing

Should both Refuge units receive cattle, the units would be separated by the two-track road, with each producer being responsible for their respective fence line. The producer is responsible for all fence maintenance (permanent and temporary).

Timing

We prefer to start grazing as early as possible, but no earlier than May 15. Graze duration depends on the number of animals being grazed (see AUM calculation). All animals must be removed from the unit by October 10.

***All dates are approximate. Turnout will coincide with when site conditions allow for grazing to occur on the site. Grazing periods and stocking rates may need to change based upon the amount of plant material removed, the response of the site to the grazing disturbance, and as weather conditions change. Grazing periods will be evaluated within each year and before each grazing treatment with Refuge staff to determine the intensity and duration of grazing for each unit. Cattle will be removed from a given unit when a stubble height of approximately 4-6" has been achieved, or if cattle begin seeking non-target species.**

SITE DESCRIPTION: SOUTH PRAIRIE 2

Existing Vegetation

This management area encompasses approximately 560 acres that is a mixture of restored tallgrass prairie, native mesic and dry prairie, wetlands, and non-native grasses. About 400 acres are dominated by warm (bluestems and Indian grass) and cool (brome, grammas, etc.) season grasses, while the rest of the acreage is a mix of wetland (cattails and reed canary grass), forest, and shrubby areas (mostly willows). The SW corner of this unit was hayed in fall 2022.

Sensitive Areas Management

Portions of the unit contain hydric, poorly drained soils (and the associated wetland complexes/ponds). These areas may remain saturated for extended periods of time. Successful indicators of proper grazing on these soils include minimal soil compaction from livestock activities, small noticeable areas of exposed soil, and no indications of water erosion. Long rest periods will be needed to allow for plant recovery. The wetlands and ponds will serve as the primary water sources for the livestock.

Coarse textured, droughty soils are located along hillslopes within the unit. Thin-soiled granite outcrops also are present. Proper grazing management within these sensitive areas involve adjusting the timing and duration of grazing to maintain adequate residues. Light-moderate grazing intensity will be utilized to ensure adequate soil cover/residual through all growing conditions.

Proper grazing management includes adjusting timing and duration of grazing to enhance grassland diversity. Ideally, grazing will be targeted to set back cool season brome grass, brush, and cattails while invigorating prairie grasses and forbs.

Fencing

The South Prairie 2 Unit Map shows the management unit and existing fences. Note that a private landowner grazes his cattle on the inholding on the south side of South Prairie 2. The Refuge's 4-strand electric fence acts as a barrier between these parcels. Any additional barriers are the grazer's responsibility.

Perimeter fence:

There is ~10,800 ft of 4-strand, high tensile electric fence on the southern boundary of the unit, along Route 40 (railroad line on map). The grazer is responsible for all needed fence improvements/maintenance. No other perimeter fencing is currently available on this unit. The unit perimeter is defined by a gravel maintenance road (dashed line on map).

Estimated fence needed to enclose the rest of the unit:

- 7,200 ft (Line A = 2,700 ft; Line B = 4,500 ft)
- These distances are all estimates. Producers are strongly encouraged to make a site visit before placing bids.

Temporary fence:

Temporary fencing could be used to divide the unit into smaller management units. The temporary fencing should consist of electric fencing materials.

Estimated quantity for paddock divisions:

- Division into two equal paddocks (west and east units): ~3,700 ft
- Division into four equal paddocks: ~9,200 ft

Water

The northern boundary of the unit is defined by a large wetland/pool of water to which cattle should maintain season-long access. Several dugouts and natural wetlands also are present on the unit (solid black outlines on map). Ideally, grazing should begin on the uplands and move to the lowlands throughout the season to ensure water availability using either paddock rotation or salt blocks. Cattle may need to be removed from the unit if water sources are no longer available.

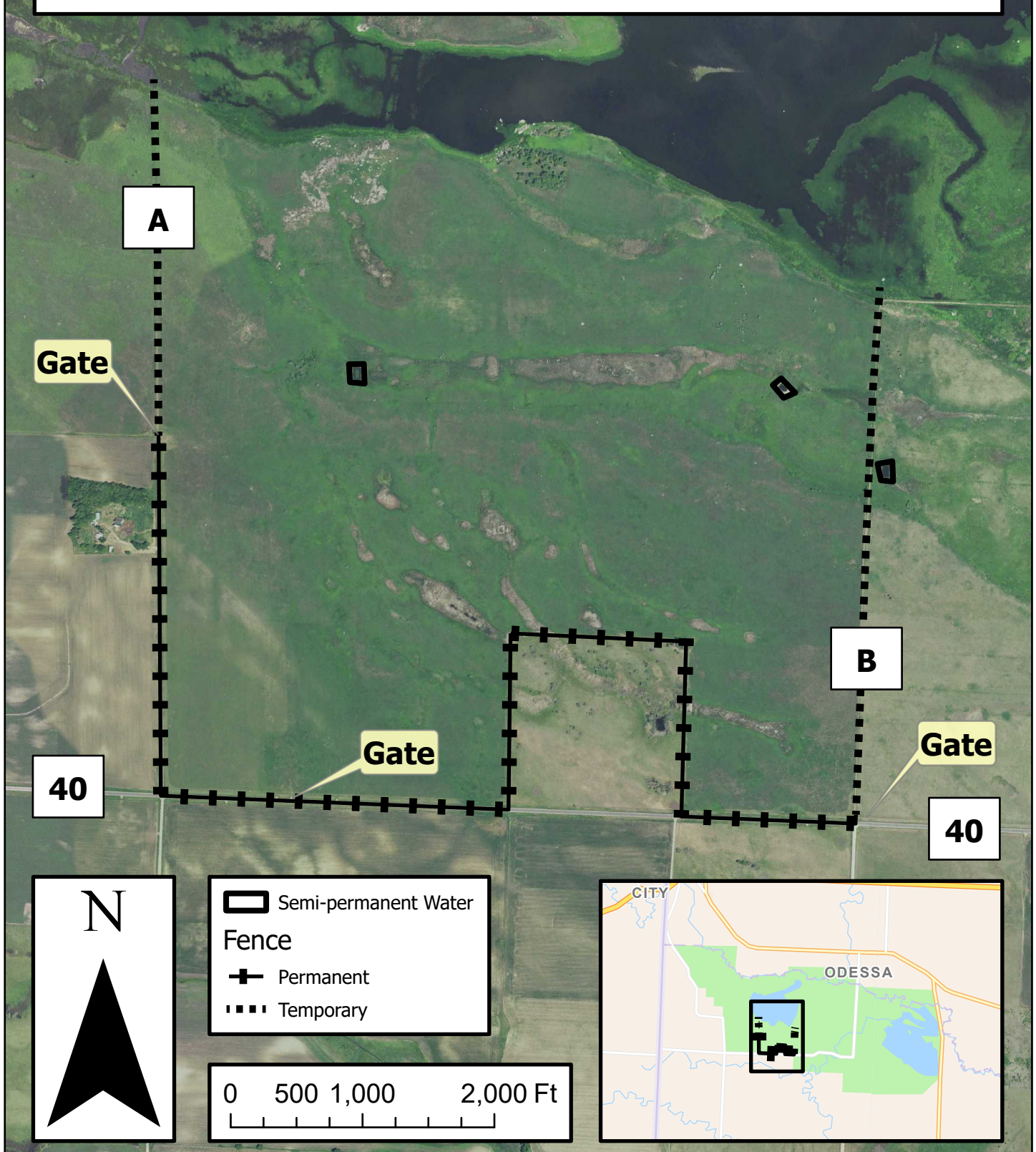
Other Considerations

Currently, tree removal projects are expected to take place on this unit in the next year or two. Contractors may need access to the northern portion of the unit with heavy equipment (e.g., skid steers) as ground conditions allow (likely late summer and into the fall). We will work with the producer to ensure that any contractor work has a minimal impact on grazing efforts. Chemical use in tree removal efforts will be highly targeted. Application will be limited to covering the bark of small shrubs/trees with a 20-25% Garlon 4:oil mix from 0-15 inches in height and the cut surface of any large trees.

Big Stone National Wildlife Refuge

South Prairie 2

560 acres (400 grass)



SITE DESCRIPTION: SOUTH PRAIRIE 3

Existing Vegetation

This management area encompasses approximately 450 acres that is a mixture of restored tallgrass prairie, native mesic and dry prairie, wetlands, granite rock outcrops, brush/woodland, and non-native grasses. About 410 acres are dominated by warm (bluestems and Indian grass) and cool season grasses (brome, gramas, etc.), while the rest of the acreage is a mix of wetland (cattails and reed canary grass), forest, and shrubby areas (mostly young cottonwoods and willows). The entire unit was burned in fall 2022.

Sensitive Areas Management

Portions of the unit contain hydric, poorly drained soils (and the associated wetland complexes/ponds). These areas may remain saturated for extended periods of time. Successful indicators of proper grazing on these soils include minimal soil compaction from livestock activities, small noticeable areas of exposed soil, and no indications of water erosion. Long rest periods will be needed to allow for plant recovery. The wetlands and ponds will serve as the water sources for the livestock.

Coarse textured, droughty soils are located along hillslopes within the unit. Thin-soiled granite outcrops also are present. Proper grazing management within these sensitive areas involves adjusting the timing and duration of grazing to maintain adequate residues. Light-moderate grazing intensity will be utilized to ensure adequate soil cover/residual through all growing conditions.

Proper grazing management includes adjusting timing and duration of grazing to enhance grassland diversity. Ideally, grazing will be targeted to set back cool season brome grass, brush, and cattails while invigorating prairie grasses and forbs.

Fencing

The South Prairie 3 Unit Map below shows the management unit and existing fences.

Perimeter fence:

There is ~5,410 ft of 4-strand, high tensile electric fence on the southern boundary of the unit, along Route 40 (railroad line on map). The producer will be responsible for all needed fence improvements and maintenance. No other perimeter fencing is currently available on this unit. The unit perimeter is defined by a two-track gravel maintenance road (dashed line on map).

Estimated fence needed to enclose the rest of the unit:

- 12,900 ft (Line A = 3,950 ft; Line B = 5,400 ft; Line C = 3,550 ft)
- These distances are all estimates. Producers are strongly encouraged to make a site visit before placing bids.

Temporary fence:

Temporary fencing could be used to divide the unit into smaller management units. The temporary fencing should consist of electric fencing materials.

Estimated quantity for paddock divisions:

- Division into two equal paddocks: ~5,280 ft
- Division into four equal paddocks: ~10,560 ft

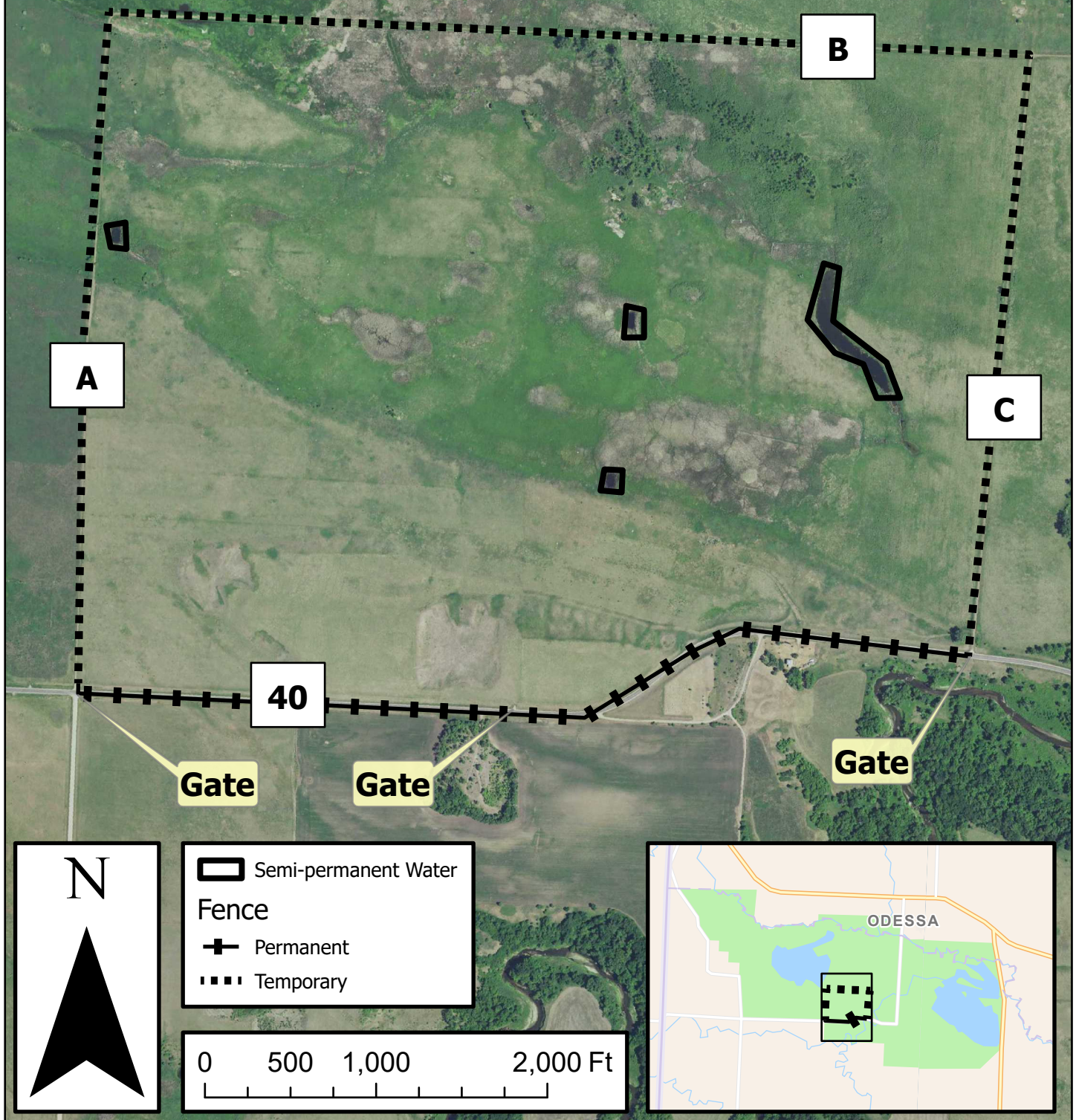
Water

Several dugouts and natural wetlands are present on the unit (solid black outlines on map). Ideally, grazing should begin on the uplands and move to the lowlands throughout the season to ensure water availability either using paddock rotation or salt blocks. Cattle may need to be removed from the unit if water sources are no longer available.

Big Stone National Wildlife Refuge

South Prairie 3

450 acres (410 grass)



Grazing Regulations:

1. The U.S. Fish and Wildlife Service reserves the right to modify or terminate the permit if habitat or public/staff safety conditions warrant.
2. Supplemental feeding is prohibited. Use of minerals (salt or protein) will be allowed. Permittee must provide product labeling to the Refuge Manager for approval prior to use. Minerals must be in a container that minimizes spillage and are easily moved and placed as required by the Refuge Manager.
3. All liability relating to livestock and livestock management to include all persons working for the Permittee, whether related, hired or as a partner, is strictly that of the Permittee as listed on the Special Use Permit (SUP). The Permittee must have/acquire liability insurance that covers the livestock being grazed on Service Lands. **A copy of the liability insurance must be provided to the Refuge.**
4. The Permittee must be in compliance with the respective state and local livestock health regulations.
5. All equipment for grazing and fence construction must have prior Refuge Management approval. Equipment includes ATVs and UTVs and must be clean and free of invasive species plant material including seeds before entering any Refuge, Waterfowl Production Area (WPA), or Service easement. The Refuge Manager reserves the right to inspect and deny the use of any equipment/vehicle/horse etc. that appears to contain invasive species, plant material, or seeds.
6. The permittee will not use any pesticides (includes insecticides, herbicides, and fungicides) on U.S. Fish and Wildlife Service lands.
7. Any livestock management action on Service land must be approved by the Refuge Manager. Branding and dehorning are prohibited.
8. Subletting is not allowed. As approved by the Refuge Manager, partnering with another rancher and custom grazing will be allowed should the number of livestock needed to achieve the desired outcome not be obtainable by a single rancher. If partnering or custom grazing is allowed, the initial Permittee will be solely responsible for the total payment, management, liability and all special conditions of the permit.
9. **All fence maintenance is the responsibility of the Permittee.** Any permanent fence constructed on National Wildlife Refuge System lands will become property of the Service. Disking and plowing are not permitted to prepare a site for fence installation. Mowing may be allowed but must be approved by Refuge staff. It is the Permittee's responsibility to assess the condition of all fences (permanent and otherwise) prior to releasing cattle into a unit/paddock.
10. Permittee agrees not to interfere with small animal exclosures (up to 0.25 acres/paddock) that may be used by Refuge staff to monitor impacts of grazers on vegetation.
11. Permittee is responsible for keeping the livestock in the specified cells and in the

unit. **Permittee is responsible for any damage to surrounding crops, pastures, or other property caused by your cattle.** If cattle escape the pasture, permittee may be required to expand or reinforce fencing.

12. All primary confinement fence lines must deliver a minimum of 2,000 volts at all times. Refuge staff will check this regularly.
13. Permittee will call and inform the Big Stone County Sheriff's Department of the location of their cattle (320) 839-3558 on the refuge and provide their contact information to law enforcement should any cattle escape. Any calls received from the Sheriff's Department should still be reported to Refuge staff.
14. Livestock watering will generally be provided via existing wetlands. During dry periods when wetlands do not contain water, supplemental watering will be allowed. Any methods and locations of supplemental watering on Service lands must be approved by the Refuge Manager. Creating new or expanding existing dugouts will not be permitted.
15. The Permittee must notify the Refuge Manager of deceased livestock. Deceased livestock must be removed from Service lands within 48 hours of discovery unless other arrangements have been approved by the Refuge Manager.
16. Following the completion of the final year of the permitted grazing season, removal of all temporary fencing and other equipment provided by the permittee is required. Failure to remove materials within 1 month after the completion of the final grazing season will result in a monetary fine and potential loss of consideration for future grazing permits.
17. The Permittee agrees that the special use conditions specified above are in effect during the first year of operation. If this permit is for more than one year the conditions may be altered or modified annually, following the first year of operation. Changes in the permit must be made prior to the grazing season by an addendum, which is attached to and becomes part of the agreement.
 - i. The Service must provide the permittee those changes to the permit prior to February 1st by a written addendum.
 - ii. The permittee then has until February 28th to accept or turn down changes.
 - iii. If the changes are agreed upon by the permittee, the addendum is signed and attached to the SUP and becomes part of the permit. If the changes are not accepted, the selection process will begin again.
18. Cooperators must be able to respond in a timely manner in case of issues.
19. Permittee must provide a tax identification number or SS# for billing purposes.

I have read the above grazing regulations and understand failure to comply could result in revocation of grazing privileges.

Permittee Signature: _____ **Date:** _____

Ranked Bid Selection Criteria Information

Unit Name (circle one): South Prairie 2 or South Prairie 3

One bid sheet per unit

1) Bid Amount \$ _____ (\$ per Animal Unit Month (AUM))

- Highest bid receives the most points. The remaining bids will be scored as a percentage of the highest bid. Possible score values (1-7)

2) Ability to respond to issues. Address: _____

- Provide home address of you or your associates that would respond and Google Maps will be used to measure distance and travel time to the unit listed above. Response times within 30 minutes will receive full points, with decreasing point value in 15-minute increments. Possible score values (1-7)

3) Animal movement strategy:

- Number of paddocks _____ (this number will be multiplied by 3).
- Animals will be moved with salt blocks: **Yes / No** (circle one, “Yes” is 3 points)
- *Please include a map with a sketch of your paddock design*
- See unit maps with highlighted water sources. Paddock divisions should be drawn in to ensure that bidder is roughly aware of how much additional temporary fence they are committing to erecting. Winning bidders will be required to meet with Refuge staff to discuss the grazing plan. Final fence placement will be discussed and determined at this time. Unrealistic or incomplete paddock information will result in 0 points for this section.

4) Provide the size of pasture being rested _____ (grassland acres only).

Address/Location: _____

- A rested pasture equal or greater in size to the grazed portion of the Refuge unit will receive full points, with decreasing points assigned dependent on the percentage of the rested pasture acres to the acres to be grazed on the Refuge unit. Provide location by legal description with landowner name if different than applicant and map(s). Possible score values (0-7)

5) Provide the length of time (in days) that the pasture will be rested each growing season while animals are on the Refuge unit. _____ days

- The more days rested the greater the points. Possible score values (0-3)

6) Circle any services that you would be interested in doing. Cost estimates of services performed (beyond obligatory fence maintenance) will be subtracted from your yearly bill. This must first be discussed with and approved by Refuge staff before any work could begin. Possible score values (0-4).

- Tree removal
- Old fence removal
- Scrap removal
- Other? _____

7) Number of years to maintain the contract: _____ (no more than 3 years)

- Our preference is for a 2 year contract, followed by a 1 or 3 year contract, but this will only be considered if there is a tie in all other categories.

8) Rough timeline: _____ (how many cattle/AU when?)

- Early (May 15-June 30) and late grazing (Sept 15-Oct 10) are preferred. Season long grazing is acceptable. The bid that aligns closest to these dates receives the most points. The remaining bids will be scored relative to this bid. Possible score values (1-7)

***I understand that all dates are approximate. Turnout will coincide with when site conditions allow for grazing to occur on the site. Grazing periods and stocking rates may need to change based upon the amount of plant material removed, the response of the site to the grazing disturbance, and as weather conditions change. Grazing periods will be evaluated within each year and before each grazing treatment with Refuge staff to determine the intensity and duration of grazing for each unit. Cattle will be removed from a given unit when a stubble height reaches 4-6" or if cattle begin seeking non-target species.**

The U.S. Fish and Wildlife Service reserves the right to reject any or all bids.

If selected, I agree to the terms laid out my bid. Any changes to the conditions outlined above can only be made in accordance with best grassland management practices and with the written approval of Refuge staff.

Sealed bids must be received by 4:00 pm February 8, 2023. Send or drop off at:

Big Stone NWR

44843 County Road 19

Odessa, MN 56276

(320) 273-2191

Permittee Signature: _____ **Date:** _____

Printed Name: _____ **Phone #:** _____

Address: _____