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Rocky Mountain Region / Nebraska National Forests & Grasslands

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Biennial Monitoring Evaluation Report for the Nebraska National Forests & Grasslands

Fiscal years 2021 - 2023



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Table of Contents

Why Monitoring Matters	2
Partnerships and Data Sources	4
Report Summary	4
Recommended Changes.....	6
Forest Supervisor's Certification	6
Watershed Condition	7
Watershed Monitoring Questions and Key Results	7
Focal Species	12
Focal Species Monitoring Questions and Key Results.....	12
Select Ecological Conditions that Contribute to Species Recovery	16
Ecological Conditions Monitoring Questions and Key Results	16
Visitor Use and Recreation	18
Recreation Monitoring Questions and Key Results.....	18
Progress Towards Desired Conditions	24
Desired Conditions Monitoring Questions and Key Results.....	24
Management and Productivity of the Land	30
Management/Productivity Monitoring Questions and Key Results.....	30
Questions Not Addressed	33
Summary of Results and Recommendations	34

Why Monitoring Matters

There is no single correct approach to managing a forest or grassland. Each decision maker must weigh the ecological complexity of the ecosystems, the social and economic contributions, the changing environmental conditions, the many different viewpoints of the public, and uncertainty about long-term consequences.

Data from monitoring can therefore be extremely useful. A robust, transparent, and meaningful monitoring program can provide information on specific resources, management impacts, and overall trends in condition – in other words, feedback on whether we are meeting our management objectives.

Every national forest or grassland has a land management plan that balances tradeoffs among recreation, timber, water, wilderness, wildlife habitat, and other uses. The plan describes a set of desired conditions – a science-based vision for the state of the forest or grassland once the goals of the plan are met. The land management plan includes a monitoring plan, organized around a set of monitoring questions and indicators that are designed to track progress toward achieving the desired conditions. Monitoring of certain resources is required by law, regulation, or policy (see box below for required monitoring topics). Other monitoring occurs depending on specific needs of the national forest or grassland. Under the [current planning rule](#), monitoring questions developed for the monitoring plan must be “within the financial and technical capability” of the Forest Service, meaning that we must have the money and ability, including support from partners, to actually carry out the strategic monitoring outlined in the monitoring plan.

Every two years, each forest or grassland strives to compile and evaluate monitoring results and draft a biennial monitoring evaluation report (BMER) like this one. If the monitoring report reveals that we are not quite meeting the mark, then there might be a need to change the land management plan, the management activities, the monitoring plan, or to reassess current conditions and trends—this is adaptively managing. Monitoring results allow us to learn through management and adjust our strategies based on what we learned. Monitoring also helps us be accountable and transparent to interested and affected parties and colleagues. BMERs are critical to adaptive management because they tell us and the public whether the land management plan is working. Although we don’t make any decisions in BMERs, they are a great opportunity to document and share monitoring results.

Our [land management plan](#) is available on our website. The [monitoring plan](#), created in 2001, was [amended in 2016](#).

Monitoring questions must address the following topics (per 36 CFR sec 219.12 - Monitoring and Forest Service Manual 1909.12 sec. 32.13 - Content of the Plan Monitoring Program):

1. Status of select watershed conditions.
2. Status of select ecological conditions including key characteristics of terrestrial and aquatic ecosystems.
3. Status of focal species to assess the ecological conditions.
4. Status of a select set of the ecological conditions to contribute to the recovery of federally listed threatened and endangered species, conserve proposed and candidate species, and maintain a viable population of each species of conservation concern.
5. Status of visitor use, visitor satisfaction, and progress toward meeting recreation objectives.
6. Measurable changes on the plan area related to climate change and other stressors that might be affecting the plan area.
7. Progress toward meeting the desired conditions and objectives in the plan, including for providing multiple use opportunities.
8. Effects of each management system to determine that they do not substantially and permanently impair the productivity of the land.
9. Social, economic, and cultural sustainability must also be addressed in the monitoring plan because sustainability is an inherent part of several of the required monitoring items.

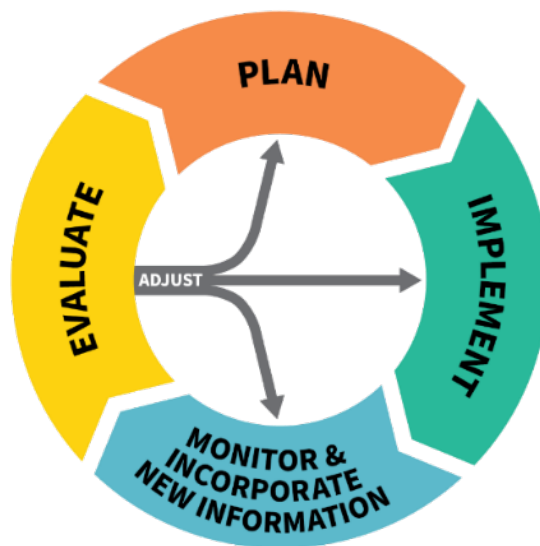


Figure 1. Adaptive Management Cycle

Partnerships and Data Sources

To accomplish our mission, the Forest Service partners with land management agencies across all levels of government, with nonprofit and for-profit entities, universities, and communities large and small. The diversity of our partners parallels the breadth of Forest Service work that includes: managing the nation's 193 million acres of National Forest System lands to sustain healthy terrestrial and aquatic ecosystems; conducting collaborative research that connects the agency to hundreds of partners around the world; supporting States, Tribes, communities, and nonindustrial private landowners through technical and financial assistance; protecting communities and the global environment from catastrophic wildland fires, climate change and invasive species; and inspiring life-long connections to nature for every American.

We also rely on existing data sources such as national and regional inventory, monitoring, and research programs; Federal, State, or local government agencies; scientists, partners, and members of the public; and information from Tribal communities and Alaska Native Corporations.

Report Summary

The Nebraska National Forests & Grasslands is composed of three national grasslands (Oglala, Buffalo Gap, and Fort Pierre), two national forests (Nebraska and Samuel R. McKelvie), and the Bessey Nursery, the oldest Federal tree nursery in the national forest system. Even though it is named the "Nebraska", about half of the forests and grasslands are in South Dakota (Figure 2, next page).

This biennial monitoring evaluation report (BMER) for the Nebraska National Forests & Grasslands (Nebraska) documents monitoring activities that occurred during fiscal years 2021 through 2023. Some questions include earlier years' ongoing data. Resource specialists answered 22 of the 33 monitoring questions in the Forest and Grassland Monitoring Plan (forest plan) to determine if current activities are moving the forests and grasslands toward, away from, or maintaining the desired conditions in the 2002 Revised Land and Resource Management Plan.

The data and specialist's reports used to build this monitoring report are available on request by contacting us at 125 N. Main Street, Chadron, Nebraska 69337 or (308) 432-0300. This monitoring evaluation report and previous reports are available at [this website link](#).

Of the monitoring questions examined, we are meeting plan objectives or progressing toward our desired conditions in eight, not meeting objectives for five, and uncertain about progress on ten of them (Table 1).

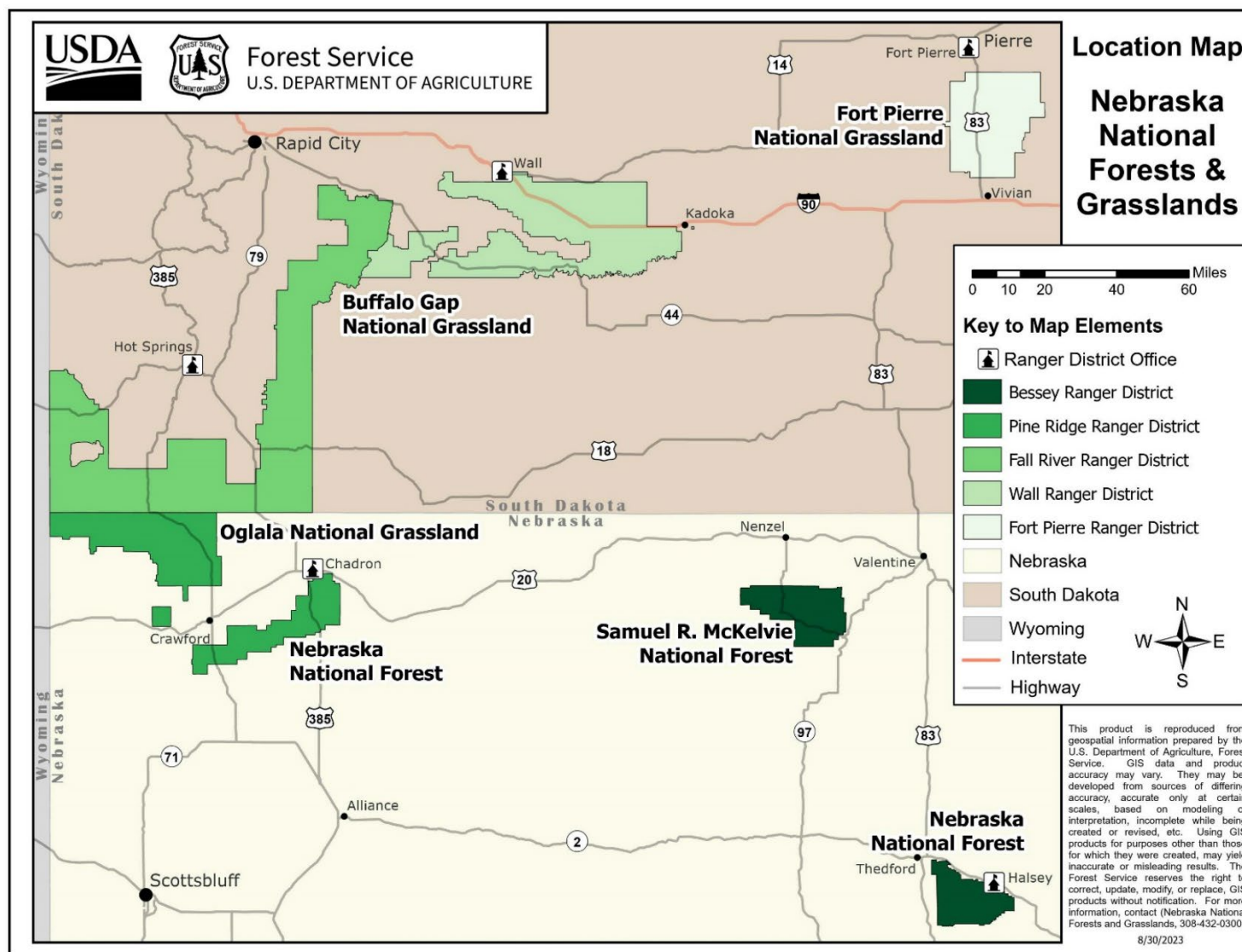


Figure 2. Map of the Nebraska National Forests & Grasslands.

Recommended Changes

Table 1 tallies our findings. It shows how many monitoring indicators are meeting the forest plan direction, or whether changes to the forest plan, management activities, or the monitoring plan should be considered. See Table 5 at the end of this report for a summary of the monitoring questions, results, and recommendations.

Table 1. Adaptive management recommendations for all monitoring questions addressed in this report.

Recommendation Factors*	Yes	No	Uncertain	Not applicable
Indicators showing progress toward desired condition objectives	8	5	10	2
Changes to forest plan recommended	2	6	--	--
Changes to management activities recommended	11	--	--	--
Changes to monitoring plan recommended	13	--	--	--
Focused assessment recommended	0	0	0	--

*The rows and columns at right do not add up to 22 because the questions have multiple indicators or do not lend themselves to a Yes/No answer (indicated by --).

Forest Supervisor's Certification

This report documents the results of monitoring activities that occurred from fiscal years 2021 through 2023 on the Nebraska National Forests and Grasslands.

I have reviewed the monitoring and evaluation results and recommended changes to the 2002 Revised Land Management Plan presented in this report. I plan a deeper examination of the recommended changes as we embark on forest plan revision in 2025.

JACK L. ISAACS
Forest Supervisor

Watershed Condition

Watershed Monitoring Questions and Key Results

WS 1: To what extent has the condition on watersheds containing National Forest System lands been restored, maintained or improved?

Indicator: Sixth level watersheds containing NFS lands in a Watershed Condition Class of I, II, or III.

*Results: Overall trend **cannot be determined** because of a lack of data.*

Of the Nebraska's 147 watersheds, 105 are functioning properly and 42 are functioning at risk. None are impaired. The Nebraska assigned priority designations to the Ash Creek and Big Bordeaux Watersheds on the west side of the Nebraska National Forest in 2011 and 2017, respectively. The Nebraska has not conducted watershed assessments since 2015.

- Between 2020 and 2022, the Pine Ridge Ranger District planted milkweeds, shrubs, and hardwood trees along East and West Ash Creeks and in the Slicker, Sawlog, and Cherry Creek livestock grazing allotments (Photo 1). The district also thinned ponderosa pine trees in some of the same areas. These actions improved 5.2 miles of stream.



Photo: 1. Crew planting along West Ash Creek, 2020.

- In summer 2023, at the Fort Pierre National Grassland, the South Dakota Game, Fish, and Parks Department and the USDA Forest Service (Forest Service) installed rocked boat ramps at both Sheriff (Photo 2) and Smith Dams. Graveled boat ramps prevent wheel ruts and subsequent erosion from people launching fishing boats from the shore.



Photo: 2. Newly installed, graveled boat ramp at Sheriff Dam. July 2023.

- Also at Fort Pierre National Grassland, roads on clay flats leading to ponds are often rutted (Photo 3), contributing sediment to waters. In 2023, several of those roads were relocated.



**Photo: 3. Old location of Forest Service Road 219-A, looking east. Note rutted crossing of swale (arrow).
September 2017.**

WS 2: Are Streams and Waterbodies meeting State assigned Beneficial Uses and associated water quality criteria?

Indicator: Streams and waterbodies meeting or exceeding state water quality criteria for assigned beneficial uses.

*Results: Overall trend **cannot be determined** due to a lack of data.*

Unless most or all of the waterbody is on National Forest System lands, or unless there is an obvious source such as a mine or gravel pit, attributing the deficiency (or a portion of it) to management actions by the Nebraska is difficult. That said, 15 streams and lakes on or crossing National Forest System lands do not meet one or more of their assigned water quality criteria.

WS 4: To what extent have surface water, sub-surface flows, and aquifers been protected from contamination from abandoned wells?

Indicators: Number of abandoned wells decommissioned to meet State specifications required by law. Incidents of aquifer contamination.

*Results: Overall trend **cannot be determined** from the data available.*

Field observations indicate that some improperly abandoned wells exist (Photo 4). These could act as a conduit for potential aquifer contamination. Between 2021 and 2023, the Nebraska recorded only one well with the state of Nebraska as being properly abandoned. We have no data on aquifer contamination.



Photo: 4. Abandoned well in Diamond Bar allotment, 2015.

- Beginning in 2015, the Nebraska National Forest (east side) stipulated that a condition for drilling a new well is that the old one be properly abandoned. As a result, 18 wells were properly decommissioned on the unit between 2015 and the publication of this report. Figure 3, next page, shows the locations of decommissioned wells registered with Nebraska and South Dakota.

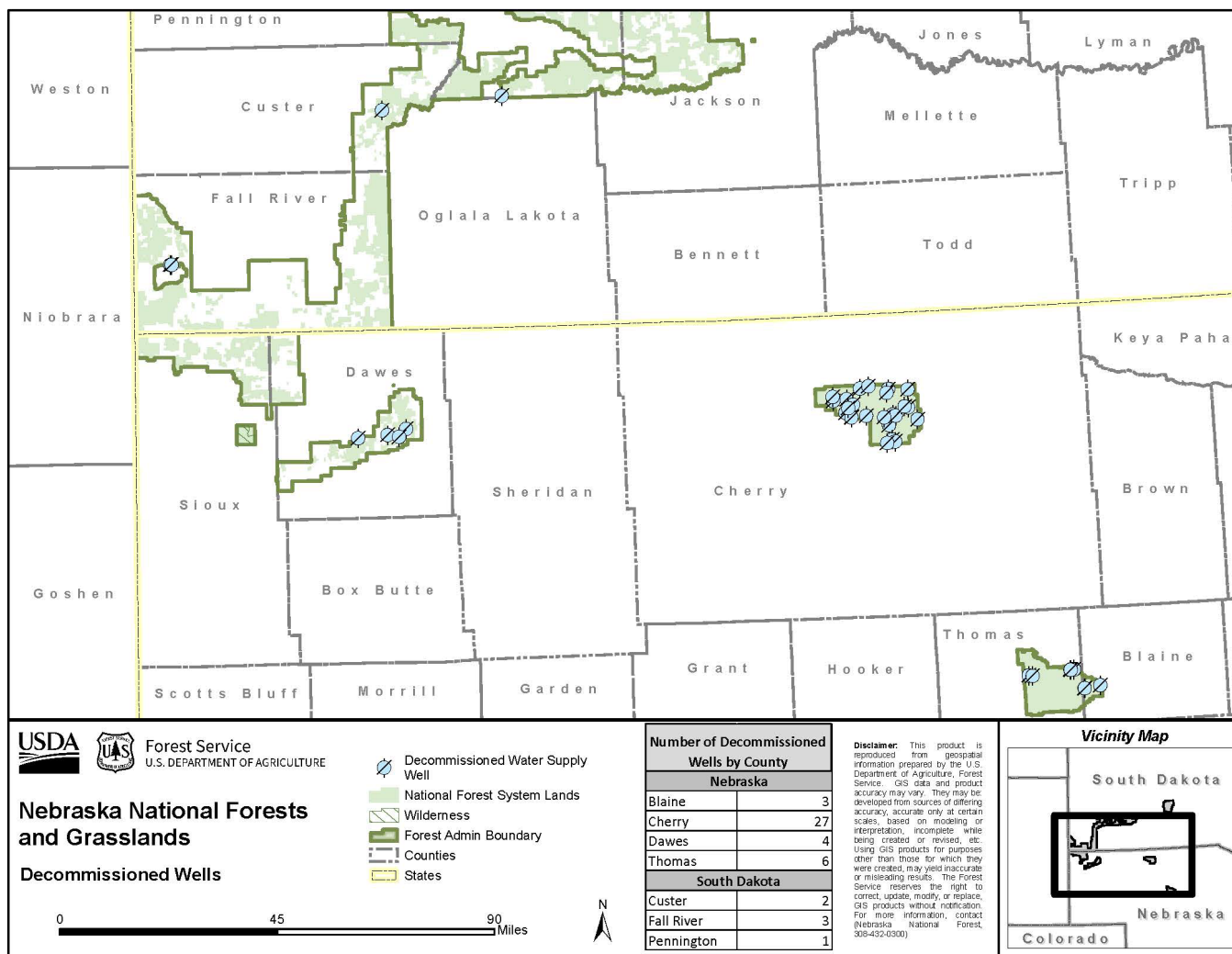


Figure 3. Map depicting all properly decommissioned wells on the Nebraska National Forests & Grasslands. Data source: NE and SD databases.

Recommendations

Monitoring questions	Progress towards desired conditions and objectives	Recommended action(s)
WS 1: To what extent has the condition on watersheds containing National Forest System lands been restored, maintained or improved?	<i>Overall trend cannot be determined due to a lack of data.</i> Two rock boat ramps were installed, and 5.2 miles of stream were restored.	Change the forest plan to set timeframes in which we specify how many watersheds are a priority. For example: "Designate three priority watersheds every five years."
WS 2: Are Streams and Waterbodies meeting State assigned Beneficial Uses and associated water quality criteria?	<i>Overall trend cannot be determined due to a lack of data.</i> Fifteen waterbodies or streams do not meet water quality criteria assigned to them, but their condition cannot definitively be attributed to activities on National Forest System lands.	Change monitoring indicators to focus on streams and waterbodies NOT meeting beneficial uses and water quality standards since this is what is reported by the states of Nebraska and South Dakota.
WS 4: To what extent have surface water, sub-surface flows, and aquifers been protected from contamination from abandoned wells?	<i>Overall trend cannot be determined from the data.</i> Forty-six wells have been registered as decommissioned with Nebraska and South Dakota since 1986. Field observations show it is likely that wells have been improperly abandoned.	Change management actions to create and maintain a current inventory of abandoned wells and develop a plan to decommission them. Require development of any new water sources to be coupled with proper decommissioning of another current or abandoned water source. Require contractors to register wells they decommission on behalf of the Forest Service. Change the monitoring plan to remove the indicator "instances of aquifer contamination" because the Nebraska does not have the funding or staffing capacity to make this determination.

Focal Species

Focal Species Monitoring Questions and Key Results

FS 1: What is the status of black-tailed prairie dog to assess the functional role of colony habitat?

Indicator: Historical vs. current acreage levels; prairie dog town occupancy, extent and density; and sylvatic plague extent/changes.

*Results: Overall trend **is towards** the target in the forest plan.*



Photo: 5. Black-tailed prairie dogs eating experimental fipronil-treated bait designed to kill sylvatic plague without harming the animals. Undated photo by David Eads.

In 2023, acres of black-tailed prairie dog habitat (7,859) met the forest plan’s objective (Table 2) for the first time since monitoring began in 2005. The objective in the forest plan is to have 6,000 to 17,400 acres of black-tailed prairie colonies. Occupancy of the prairie dog colonies varies by site and time.

The Nebraska has not observed a trend in the occupancy of prairie dog colonies following sylvatic plague. Following an outbreak, prairie dogs may recover, expand, or decline.

Table 2. Acres of occupied prairie dog colonies.

Geographic Area	Target Acres in Forest Plan Objective	2020	2023
		Acres occupied	
Fall River NE	1,000-2,700	34	Not surveyed
Fall River W	1,000-3,600	130	
Fall River SW	Increase populations, develop a colony	--	1,590*
Fort Pierre	1,000-3,500	1,802	2,316
Oglala	1,000-2,800	584	1,830

Geographic Area	Target Acres in Forest Plan Objective	2020	2023
		Acres occupied	
Wall N	1,000-2,100	561	589
Wall SE	1,000-2,700	2,394	2,960
Wall SW	Maintain three or more colonies	--	15,547*
Total	6,000-17,400	5,505	7,859

*Not included in total because forest plan doesn't list an acreage objective for these units. No information on the number of colonies is available.

FS 3: What is the status of prairie grouse (plains sharp-tailed and greater prairie chicken) to assess the functional role of grassland vegetation habitat?

Indicator: Acres and distribution of potential prairie grouse habitat; current condition and trend of grassland vegetation structure; current condition and trend of forb/shrub patches.

*Results: Overall trend **is away from** the target in the forest plan for the Nebraska National Forest (east side).*

In recent decades, the population of prairie grouse in the east side of the Nebraska National Forest has trended downward. In the 1960s, annual harvests exceeded 700 birds whereas current average harvest approaches 200 birds (Figure 4). The decline is likely due to multiple factors: habitat homogeneity, encroachment by eastern red cedar, landscape level fragmentation, land conversion, and production-driven grazing management that does not account for different conditions required for all life stages of prairie grouse.

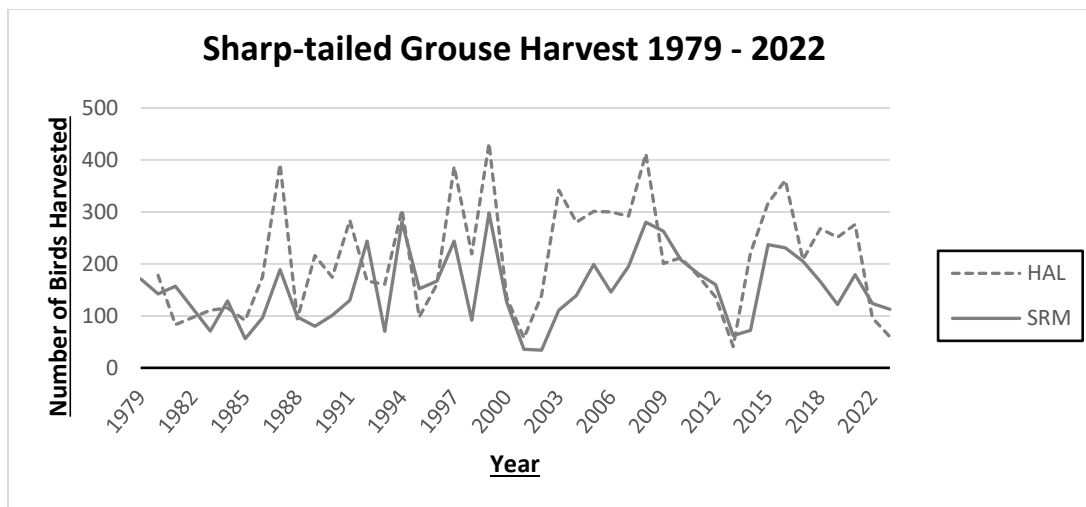


Figure 4. Wing counts of hunter-harvested sharp-tailed grouse in Sandhills units. HAL = Nebraska National Forest at Halsey; SRM = Samuel R. McKelvie National Forest.

- Despite a lack tall vegetation, grouse numbers remain stable at Samuel R. McKelvie National Forest as opposed to the Nebraska National Forest. This stability could be attributed to the lack of encroachment by eastern redcedar at McKelvie. Near Halsey, even though grazing is being conducted to create ecological conditions beneficial to prairie grouse, cedar encroachment has

become so heavy (Photo 6) that much of the encroached areas are no longer suitable habitat for prairie grouse. McKelvie consistently has the highest number of harvested birds of all large public land units in the Nebraska Sandhills. Public land managers have actively restored large areas of grassland during the last eight years, which has likely improved prairie grouse habitat.



Photo: 6. Cedar encroachment in landscape desired condition “to maintain open and scenic plains and vast prairie landscapes”.

- On the east side of the Nebraska National Forest, district staff are engaged in large-scale cedar removal efforts, but responses by prairie grouse have not yet been observed, nor has the long-term ability to keep these areas tree-free been proven. Prairie grouse have returned to some areas where cedar removal has occurred, indicating that this strategy may improve overall grassland bird numbers if keeping a tree-free prairie can be sustained.

FS 4: To what extent have cooperative agreements and the landownership adjustment program been effective in reducing private land conflicts involving prairie dogs and in enhancing long-term opportunities for development of prairie dog colony complexes in the priority National Grassland areas?

Indicator: Number of conflict situations resolved; additional acres of potential or current prairie dog habitat under federal ownership or cooperative agreements.

Results: Overall trend **cannot be determined** from the data provided.

The Nebraska does not have data on the number of conflict situations resolved, which is a metric that is difficult to ascertain. A situation could appear to be resolved only to flare up at a later date.

Recommendations

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
FS 1: What is the status of black-tailed prairie dog to assess the functional role of colony habitat?	<i>Overall trend is towards the target in the forest plan.</i> For the first time since monitoring began in 2005, acreage of habitat is within the desired range listed in the forest plan.	Change the land management plan to include acreage objectives for all areas that have or could have prairie dog colonies to enable consistent comparison. Change the monitoring plan to simplify the indicators and reduce their redundancy. Question EC 2 has the same indicators, for instance.
FS 3: What is the status of prairie grouse (plains sharp-tailed and greater prairie chicken) to assess the functional role of grassland vegetation habitat?	<i>Overall trend is away from the target in the forest plan.</i> Despite management activities geared towards improving habitat, numbers of prairie grouse on National Forest System lands in the Nebraska Sandhills is on the decline.	Change management activities to increase the rate of woody encroachment control, and provide grazing regimes that create a more dynamic, shifting, and heterogeneous habitat across the management units. Change the monitoring plan to include lek counts. Change the monitoring plan to include wing counts.
FS 4: To what extent have cooperative agreements and the landownership adjustment program been effective in reducing private land conflicts involving prairie dogs and enhancing long-term opportunities for development of prairie dog colony complexes in the priority National Grassland areas?	<i>Overall trend cannot be determined from the data provided.</i> The Forest Service has acquired minimal acreage since 2004.	Change the monitoring plan to remove this question, which is nearly impossible to answer.

Select Ecological Conditions that Contribute to Species Recovery

Ecological Conditions Monitoring Questions and Key Results

EC 2: What is the status and trend of habitat to support the recovery of the black-footed ferret on the planning unit?

Indicator: Historical vs. current acreage levels; prairie dog town occupancy, extent and density; and sylvatic plague extent/changes.

*Results: Overall trend **is towards** the target in the forest plan.*

Question FS 1 (page 12) describes the status of these indicators. Forest wide, habitat for the ferret is stable to slightly increasing (Figure 5). The forest plan designates four areas as habitat for black-footed ferrets:

- Smithwick - We have not found ferrets in the Smithwick area or nearby tribal lands. Suitable habitat is at 700 acres (2023), which is more than double the acreage counted in 2020.
- Conata Basin - The Conata Basin is home to about 152 ferrets, more than half of the world's wild population. Acres of habitat increased slightly from 2020 to around 15,000 acres.
- Steer Pasture - Ferret habitat in the Steer Pasture area declined slightly from about 850 to 800 acres in 2023, likely due to sylvatic plague.
- Fort Pierre - In 2023, staff from the Fort Pierre Ranger District conducted ferret surveys cooperatively with staff from the Lower Brule Sioux Tribe and the US Fish and Wildlife Service. Five wild-born ferrets – a new population - were trapped, vaccinated for plague and canine distemper, and tagged. Ferret habitat increased to 2,000 acres (from about 1,500) in 2023.

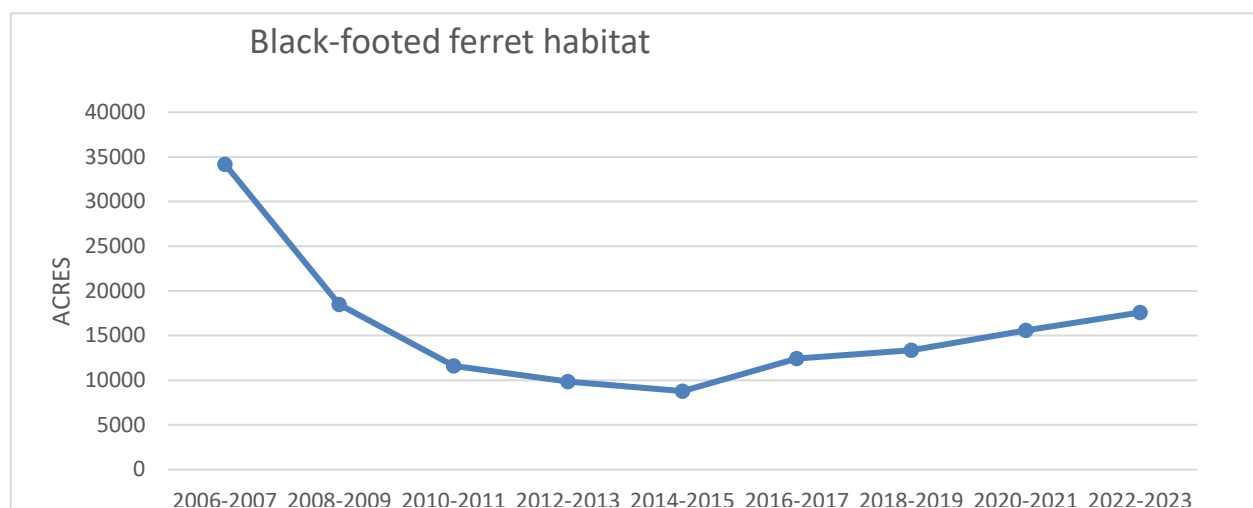


Figure 5. Total acreage of black-footed ferret habitat on the Nebraska National Forests & Grasslands.

EC 3: What is the status and trend of habitat to support the recovery of the blowout penstemon on the planning unit?

Indicator: Sandhill blowout extent and size; historical vs. current acreage levels of Sandhill blowouts.

*Results: Overall trend of blowout extent and size is **away from** the target in the forest plan.*

The Samuel R. McKelvie and east side of the Nebraska National Forests, which have more than 70 percent of the known populations of blowout penstemon in Nebraska, are the only locations in the state with stable populations of the species. The reason the population remains stable is that the Forest Service has reintroduced plants at a rate to compensate for population losses.

Overall, however, blowout habitat is on the decline. Conservative grazing strategies meant to stabilize soils have reduced the number and size of blowouts in the Nebraska and Samuel R. McKelvie National Forests, and in the Sandhills overall. In 2023, only 25 acres of suitable blowout penstemon habitat remained within the more than 210,000 acres of National Forest System land in the Sandhills.

In 2023, no new plantings were conducted as most available bare sand habitats capable of scouring seeds and perpetuating blowout penstemon naturally have already received reintroductions.

Recommendations

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
EC 2: What is the status and trend of habitat to support the recovery of the black-footed ferret on the planning unit?	<i>Overall trend is towards the target in the forest plan.</i> Forest Service biologists located a new population of ferrets in the Fort Pierre National Grassland.	None.
EC 3: What is the status and trend of habitat to support the recovery of the blowout penstemon on the planning unit?	<i>Overall trend of blowout penstemon habitat extent and size is away from the target in the forest plan.</i> Moderate to conservative grazing on National Forest Systems lands has decreased the acreage of blowouts available as penstemon habitat.	Change the indicators in the monitoring plan to include number of populations introduced to new areas on and off National Forest System lands (the latter through partnerships). Change management activities to increase the size and extent of blowouts.

Visitor Use and Recreation

Recreation Monitoring Questions and Key Results

REC 1: To what extent are trails managed to meet regional standards and to minimize conflicts among users?

Indicator: Location and miles of trails meeting and not meeting regional standards.

*Results: Overall trend **exceeds** the target in the forest plan.*

While the number of miles maintained and reported varied by district, the Nebraska has exceeded the target in the forest plan and is successfully maintaining the majority of its trail system. The percent of trails maintained during the monitoring period appears lower than prior years because the east side of the Nebraska National Forest did not report due to staff turnover.

- In 2022, data show that the Nebraska maintained 49 percent (186 miles) of National Forest System trails to standard, with the west side of the Nebraska National Forest and west side of Buffalo Gap National Grassland reporting. Reporting in prior years shows that the east side of the Nebraska National Forest typically maintains all of its trails. In 2022, it had two large wildfires (201 East and Bovee) that covered a portion of the district's trails. Fire crews did rudimentary maintenance, including removing tree limbs and fallen trees along and on trails, to improve public safety. The Nebraska also maintained four miles of non-system trails to standard.



Photo: 7. Maintaining a trail on the Pine Ridge Ranger District.

- In 2023, the Nebraska maintained 37 percent (141 miles) of National Forest System trails to standard, with west side of the Nebraska National Forest and west side of Buffalo Gap National Grassland reporting. Bessey Ranger District did not report in 2023 due to staff turnover and fire recovery efforts. Rudimentary trail maintenance in the wildfire areas continued through 2023, with

salvage operations focused along trails and roads. The Nebraska also maintained one mile of non-system trail to standard.

Indicator: Reports of conflicts among users.

*Results: Overall trend **cannot be determined** from the data provided.*

The east side of the Nebraska National Forest reported no conflicts between off-highway vehicle users and equestrians during the summer of 2023. No other data for the monitoring period was provided.

REC 3: To what extent are Grassland and Forest visitors informed of the recreation opportunities available to them; are they adequately guided to those recreation opportunities; and do they receive adequate interpretive information on National Register of Historic Places and other heritage sites, geologic, palaeontologic, wildlife, plant, and recreation resources or opportunities?

*Results: Overall trend is **towards** target in the forest plan.*

The Nebraska continues to improve how it communicates the Forest's opportunities, especially capitalizing on the use of social media and virtual opportunities.

- The Bessey Ranger District installed two virtual kiosks that lets visitors download interpretive guides and maps to their phones, including about wildlife found in the area, a history of the hand-planted forests, a tree identification guide, motor vehicle use maps, an electronic version of the Junior Ranger Program, and a flyer about the Charles E. Bessey Nursery. It ran a pilot funded at the national level, called Agents of Discovery. When funding for the program was reduced, the forest decided to pause the program.
- In-person events such as Hunter's Coffee, which is a community coffee event held on the day before rifle deer season opens (to inform hunters of rules and regulations), continued at Bessey, Samuel R. McKelvie National Forest, and Pine Ridge Ranger Districts. In 2023, Bessey piloted a program called "Musical Campfires", where Forest Service staff invited visitors to join them for informal music around a campfire after dark. Participation was low, so the program will likely not continue.
- Several district offices sell items provided by the Black Hills Forests and Parks Association. The items pertain to camping, outdoor games, outdoor education, and local items like postcards and challenge coins.

REC 4: How well is the current road and trail network providing for public needs?

Indicators: Condition of road surfaces, accessibility to developed and dispersed recreation sites, connections to other public roads, and unauthorized roads to points of interest.

*Results: Overall trend is **towards** the target in the forest plan.*

The Nebraska maintained its level 3 roads during the monitoring period. It also accomplished small projects, such as culvert repair and adding gravel to some level 2 roads. Notable for the timeframe monitored is the boost in maintenance provided by GAOA (Great American Outdoors Act), funds that resulted in aggregate being placed on the following National Forest System Roads:

- 7026 Limestone Road on the Fall River Ranger District
- 203 Circle Road on the Bessey Ranger District
- 206 Sand Creek Road and 227 Mueller Road on the Fort Pierre Ranger District
- 7116 and 7172 on the Wall Ranger District
- 717 and 723 on the Pine Ridge Ranger District



Photo: 8. FR 203 before GAOA. Road improved with clay base funded by Nebraska Recreational Trails Program.



Photo: 9. FR 203 After GAOA. Gravel aggregate placed to fortify road surface.

REC 5: To what extent are traditional cultural properties being protected?

Indicators: Condition of each site; incidents of vandalism or disruption of the use of traditional cultural properties.

*Results: Overall trend **cannot be determined** from the data provided.*

No traditional cultural properties have been identified on the Nebraska. Our staff's capacity to consult with Tribes was limited until 2023, when we hired a Tribal Liaison.

REC 6: To what extent have the special features found in Special Interest Areas been conserved or enhanced?

Indicator: Condition of features/communities.

*Results: Overall trend is **towards** the target in the forest plan.*

The two woody plant communities examined have healthy mature populations, natural regeneration of the desired species, and no encroachment of undesirable plants. The one recreation site within the Toadstool Geological Park has exploded in popularity, yet the special features for which it was identified remain intact.

- The Bur Oak special interest area shows continued health and vigor. Encroachment of undesirable plants is not evident. The bur oak trees produced a high number of seeds, but not as many seedlings as expected. The Bessey Nursery will sow collected seeds of bur oak to provide seedlings to plant for regeneration.
- The Quaking Aspen special interest area is expanding at the margins but stagnating in the heart of the stand. At the margins, livestock browse the stems, stimulating growth. The mature trees, however, lack the disturbance needed to stimulate new growth.
- The Toadstool Geological Park, located in an area of paleontological interest on the Oglala National Grassland, is among the Pine Ridge Ranger District's top-visited sites and is its most popular campground. Toadstool's visitor count in 2020 to 2022 was between 5,300 and 6,100 visitors per year: a substantial increase from pre-pandemic years. With the increased use, the district has observed several periods throughout the year when all six existing camp sites are occupied.

REC 8: What are the effects of National Forest System Management on adjacent communities?

Indicators: NFS related jobs and income; Community tourism receipts; Federal receipts, Federal revenue sharing with state and local governments.

Results: The Nebraska contributes direct and indirect jobs and labor income to the communities in which it is situated.

The discussion that follows shows the impact of the Nebraska National Forests and Grasslands in the local economy in 2019. The Nebraska supported close to 700 local jobs and \$27,510,000 in local labor income. Livestock grazing supported more than half of the jobs and income, followed by agency operations and recreation visitor use (Table 3).

Table 3. Jobs and labor Income in counties within the Nebraska National Forests & Grasslands. Data comes from standardized national data sources and was modeled by USDA Forest Service as described in the report "FY19 Economic Contributions from National Forests and Grasslands".

Category	Jobs		Labor Income	
	Direct	Total	Direct	Total
Agency Operation	120	160	\$6,712,000	\$8,123,000
Forest Products	3	4	\$131,000	\$163,000
Livestock Grazing	190	370	\$6,360,000	\$14,123,000
Minerals & Energy	0	0	\$0	\$0
Payments to Local Governments	30	40	\$1,348,000	\$1,689,000
Recreation Visitor Use	90	120	\$2,275,000	\$3,411,000

- Visitors spent an estimated \$11,015,339 on supplies, lodging, gas, food, and services as a direct result of recreating on the Nebraska. Wildlife-related visits – most likely hunting, fishing, and wildlife viewing – accounted for just more than a third of this spending. More than half the visitors came from the local area.
- Livestock grazing plays a larger role in the local economy than the national average. It provided an estimated 370 jobs; however, the average salary (at \$34,000) ranked at the lower end of the national average for jobs.

Recommendations

Monitoring questions	Progress towards desired conditions and objectives	If there is a need for change, what is recommended?
REC 1: To what extent are trails managed to meet regional standards and to minimize conflicts among users?	<i>The Forest exceeded the goal listed for trail maintenance.</i> <i>The trend for conflicts among users cannot be determined.</i>	Change the monitoring plan to separate this into two questions.
REC 3: To what extent are Grassland and Forest visitors informed of the recreation opportunities available to them; are they adequately guided to those recreation opportunities; and do they receive adequate interpretive information on National Register of Historic Places and other heritage sites, geologic, palaeontologic, wildlife, plant, and recreation resources or opportunities?	<i>The Nebraska is moving towards the desired conditions in the forest plan.</i> Recreation staff continue to find creative ways to engage the public, especially capitalizing on virtual methods.	None.

Monitoring questions	Progress towards desired conditions and objectives	If there is a need for change, what is recommended?
REC 4: How well is the current road and trail network providing for public needs?	<i>For roads, the Nebraska is moving towards the objective in the forest plan.</i> <i>For trails, the trend cannot be determined from the data provided.</i>	Change the monitoring plan to include an indicator of outside funding obtained for road and trail maintenance. Change the monitoring plan to phrase questions about trails, roads, motorized, and non-motorized without combining them unnecessarily. Change management activities to use traffic counters to assess road and trail use more accurately.
REC 5: To what extent are traditional cultural properties being protected?	<i>The Nebraska has not identified any traditional cultural properties.</i>	Remove this monitoring question as the Nebraska has no traditional cultural properties.
REC 6: To what extent have the special features found in Special Interest Areas (SIAs) been conserved or enhanced?	<i>The overall trend is towards the target listed in the forest plan.</i>	Change management actions in the Quaking Aspen SIA to include disturbance. Change management actions in the Quaking Aspen, Bur Oak, and Mountain Mahogany SIAs to collect and sow seeds to expand populations and create conservation stands. Change management actions in Toadstool Geologic Park to allow for more overnight camping (NEPA in progress).
REC 8: What are the effects of National Forest System management on adjacent communities?	<i>The Nebraska contributes direct and indirect jobs and labor income to the communities in which it is situated.</i>	None.

Progress Towards Desired Conditions

Desired Conditions Monitoring Questions and Key Results

DC 1: To what extent are rangeland vegetation structure objectives being met?

Indicators: Location and percent of rangeland area meeting, making measurable progress towards, or not meeting desired vegetation structure.

*Results: Overall trend **is stable and not meeting** the target in the forest plan.*

The east side of the Nebraska and the Samuel R. McKelvie National Forests and the Fort Pierre National Grassland submitted monitoring data for this question. “Vegetative structure” refers to the relative height of the grass, with low being short and high being tall. The target condition in the forest plan varies by unit, but generally aims for $\frac{3}{4}$ of the vegetation being in high or moderate and the remainder in low.

For the units reporting, most of the vegetative structure falls in the “moderate” category as they have for the last two reporting periods.

- At Samuel R. McKelvie and the east side of the Nebraska National Forests, approximately half of all range vegetation is in moderate structural condition. Data shown – visual obstruction readings – were collected from 1999 to 2023 in multiple allotments (Figure 6).
- At the Fort Pierre National Grassland, most range vegetation falls into the moderate structural category, which does not meet forest plan standards (Table 4).

Figure 6. Summary of structure condition at both units of Bessey Ranger District.

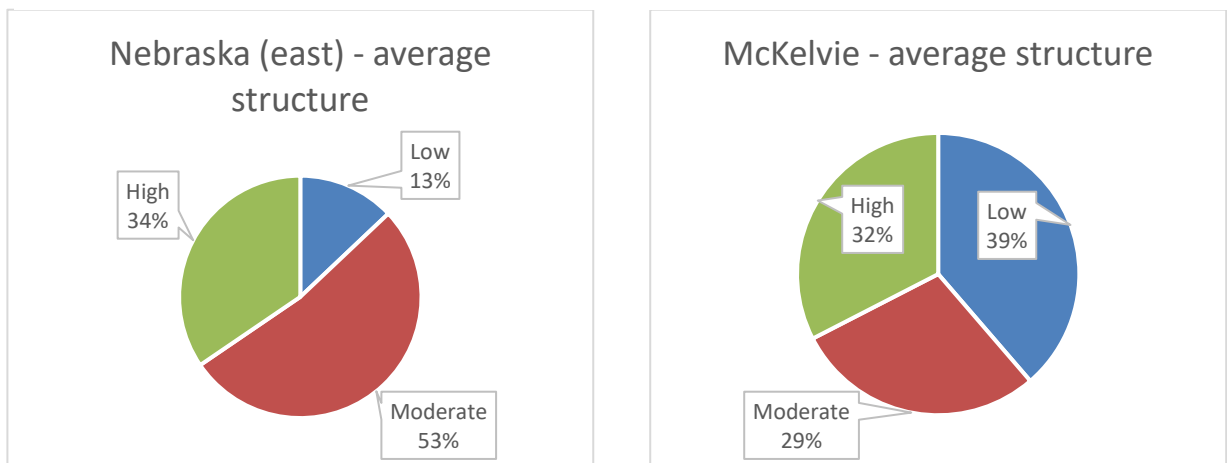


Table 4. Number of transects read on the Fort Pierre National Grassland in autumns 2022 and 2023 and the percentage (%) of those transects qualifying as high-, moderate-, and low-structure vegetation.

YEAR	Number of readings	HIGH	MODERATE	LOW
2022	52	38%	56%	6%
2023	39	26%	67%	8%
AVERAGE	39.9	31%	62%	7%

DC 2: To what extent are rangeland vegetation composition objectives being met?

Indicators: Location and percent of rangelands meeting, making measurable progress towards, or not meeting desired vegetation composition.

*Results: Overall trend **varies by location whether it meets the target in the forest plan.***

The east side of the Nebraska and the Samuel R. McKelvie National Forests and the Fort Pierre National Grassland submitted monitoring data on this question. “Vegetative composition” refers to the species of grasses and forbs present. The “seral stage”, described as early to late, refers to the kind of plants present compared to what would be present if a natural progression occurred.

- Data collected from 2015 to 2023 by Forest Service employees at the Samuel R. McKelvie and Nebraska National Forests show that vegetation communities are predominantly in early seral stages. Part of this is attributed to the type of monitoring method used. Data collected by a research-based partner show that the district meets the target for “bluestem/prairie sandreed/needlegrass prairie,” which is more of a late seral stage. This means the plants present are vigorous, productive, and palatable.
- Data collected by staff at the Fort Pierre National Grassland show that exotic vegetation comprised 7 to 100 percent of all plants sampled in 2023, with 63 percent of herbaceous vegetation being exotic overall. Comparison of 2023 data to that of the late 1980s shows that native flora decreased at all ten sites sampled over the past 35 years, with a simultaneous increase in exotic vegetation, particularly smooth brome and Kentucky bluegrass.

The forest plan’s objectives for seral categories do not address non-native species such as smooth brome, Kentucky bluegrass, and yellow sweetclover. These exotic species now dominate large portions of the Fort Pierre National Grassland. Thus, comparison of existing data to forest plan objectives is difficult other than to conclude that those rangelands are “Not meeting desired vegetation composition.”

DC 3: To what extent are desired vegetation conditions in forested areas being met?

Indicator: Location & percent of forested lands meeting, making measurable progress towards, or not meeting desired structural stages.

*Results: Overall trend **cannot be determined** from the data available.*

- Due to large-scale wildfires occurring in the last two decades, the distribution of forest structural stages and cover do not meet desired conditions in the Nebraska National Forest (west side). Staff conduct on-going reforestation to re-establishing cover, but the stands are still young. The wildfires left a mosaic of stand densities across the Pine Ridge Geographic Area where unburned stands tend to be overcrowded.

- The hand-planted forest in the Nebraska National Forest (east side) exists in a variety of conditions. In 2022 and 2023, three wildfires altered about 5,000 acres of the forest. The 201 East and Bovee Fires incinerated many stands (especially Bovee) but improved the structural condition of others. The 2023 Natick Fire appears to have been a relatively beneficial wildfire in that it mostly stayed on the ground at a low intensity, so it acted more like a prescribed fire.

District staff have masticated eastern redcedar in some pastures in the hand-planted forest, which moves the area towards desired conditions.

- Contracts are in place at Samuel R. McKelvie to remove eastern redcedar from ponderosa pine where it exists in the understory. A term-grazing-permit holder cut eastern redcedar out of his permitted allotment.
- There are currently no old growth stands in the Nebraska or Samuel R. McKelvie National Forests.

DC 4: To what extent are the Red Shirt and Indian Creek Recommended for Wilderness special features and communities of special concern conserved or enhanced?

Indicator: Condition of features / communities.

*Results: Overall trend **is away from** the target in the forest plan.*

- The Red Shirt Recommended Wilderness is nationally known for its Fairburn agate beds. The Forest Service allows people to collect agates here for personal use. Commercial collection is also likely occurring, but hard to prove. People are allowed to drive part of the way into the agate beds, which involves crossing a creek when it is flowing. Though extensive unauthorized motorized use is not present, crossing the creek disrupts the streamflow and creates sedimentation. The Forest Service has not done anything to change or enhance the management of the Red Shirt area since it was determined to be Recommended for Wilderness in 2001.
- One activity not conforming to Wilderness standards that occurs over the Indian Creek Recommended Wilderness is low-level military training flights conducted by the South Dakota Army National Guard. The Forest Service has no jurisdiction over the airspace.

DC 5: To what extent are National Register sites and districts being protected and preserved?

Indicator: Condition of each site, incidents of vandalism.

*Results: Overall trend **is towards** the target in the forest plan.*

The Nebraska has two historic properties listed on the National Register of Historic Places: Hudson Meng Bison Bonebed and Bessey Nursery. The Nebraska has invested in the preservation of both sites as described below.

- At Hudson-Meng Bison Bonebed, the Nebraska has replaced aged or broken heaters and air conditioning units, procured a museum-quality vacuum to combat crystal growth, and made efforts to reduce the regular pooling of groundwater in certain areas.
- The Bessey Nursery shop underwent interior demolition in 2021, removing the mold- and water-damaged 1980 interior walls, ceiling, furnishings, HVAC unit, plumbing, and communications wiring. The building is once again being used in a similar fashion to its original use (Photo 10).



Photo: 10. View of the Nursery shop after the demolition of the inside. The space is now being used to store items needed in the day-to-day running of the nursery including wood, irrigation supplies, and more.

DC 9: To what extent have degraded streams, riparian areas, wetlands, and other waterbodies on National Forest System lands been restored?

Indicator: Miles of degraded streams and riparian areas restored. Acres of degraded wetlands restored.

*Results: Overall trend **is towards** the target in the forest plan.*

The Nebraska implemented several projects specifically to restore degraded streams and wetlands during the monitoring period (see also Watershed section).

The Pine Ridge Ranger District replaced an undersized, aluminum culvert with a concrete structure designed for aquatic organism passage along Big Bordeaux Creek (Photos 11, 12). This project reconnected three miles of stream habitat.



Photo: 11. Before: an undersized culvert was starting to collapse and was a barrier for aquatic organism passage and high flows.



Photo: 12. After: Improved culvert structure with simulated streambed for aquatic organism passage and increased flood resiliency.

The Bordeaux Stream Trail Crossings project on the Pine Ridge Ranger District restored the natural stream banks and channel shape at 11 trail crossings (Photos 13, 14).



Photo: 13. Before: Example of unauthorized OHV use creating a low-water stream crossing that alters the natural streambed.



Photo: 14. After: stream is restored to its natural channel and a hard crossing prevents sedimentation from vehicles.

Recommendations

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
DC 1: To what extent are rangeland vegetation structure objectives being met?	<i>Overall trend is stable and not meeting the target in the forest plan.</i> For the units reporting, moderate structure dominates the landscape.	Change management activities to create variable stocking rates, intensity, and rotations to prevent the tendency to have livestock grazing produce a landscape of moderate-height vegetation.
DC 2: To what extent are rangeland vegetation composition objectives being met?	<i>Overall trend varies by location whether it meets the target in the forest plan.</i> The grasslands in the Sandhills appear vigorous and intact. The Fort Pierre National Grassland's native vegetation has declined and been supplanted by invasive grass species.	Change the monitoring method at Bessey Ranger District to periodically include in-depth frequency of vegetation occurrence and percent cover.

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
DC 3: To what extent are desired vegetation conditions in forested areas being met?	<i>Overall trend cannot be determined from the data available.</i>	Change management activities to perform additional monitoring, specifically to implement a recurring Common Stand Exam survey, by visiting every Location ID once every 10-15 years.
DC 4: To what extent are the Red Shirt and Indian Creek Recommended for Wilderness special features and communities of special concern conserved or enhanced?	<i>Overall trend is away from the target in the forest plan.</i>	For Red Shirt, change management activities to close the creek crossing when conditions warrant and also prohibit agate collection.
DC 5: To what extent are National Register sites and districts being protected and preserved?	<i>Overall trend is towards the target in the forest plan.</i>	None.
DC 9: To what extent have degraded streams, riparian areas, wetlands, and other waterbodies on National Forest System lands been restored?	<i>Overall trend is towards the target in the forest plan.</i>	None.

Management and Productivity of the Land

Management/Productivity Monitoring Questions and Key Results

MPL 1: To what extent has soil health and productivity been degraded by Forest Service management or permitted activities; and to what extent have degraded soils been restored?

Indicator: Acres of soils degraded (soil disturbance class 2 or 3) and acres of soils restored to soil disturbance class 0 or 1 by Forest Service management or permitted activities.

*Results: Overall trend **cannot be determined** from the data provided.*

The Nebraska did not conduct soil disturbance surveys during the monitoring period. Pile burning, heavy equipment working off-road, timber harvest, and prescribed fire are commonly-occurring activities that can cause erosion. Staff employ Best Management Practices (BMPs) to mitigate the effects of these actions.

- The Nebraska uses a FECON machine to masticate eastern redcedar trees (Photo 15). It has a large masticating head that grinds trees into small pieces, leaving a layer of mulch in place (Photo 16). This layer helps prevent erosion and returns biological material back to the soil.



Photo: 15. The FECON machine at the Nebraska National Forest (east side).



Photo: 16. What a newly-masticated pasture looks like.

MPL 2: To what extent are noxious weeds, invasive species, and animal damage expanding or being reduced?

Indicator: Species, location, and acres of noxious weeds, invasive species, and animal damage.

*Results: Overall trend **is away from** target in the forest plan.*

The Nebraska uses the term “undesirable” to cover invasive, non-native, noxious, and exotic plants. The acreage infested with undesirable plants has consistently increased over the last decade. Staff find new infestations every year (Figure 7), with Canada and nodding plumeless thistles being the most common. From 2020 to 2022, staff discovered and recorded three new undesirable species: bull thistle, burningbush, and charlock mustard.

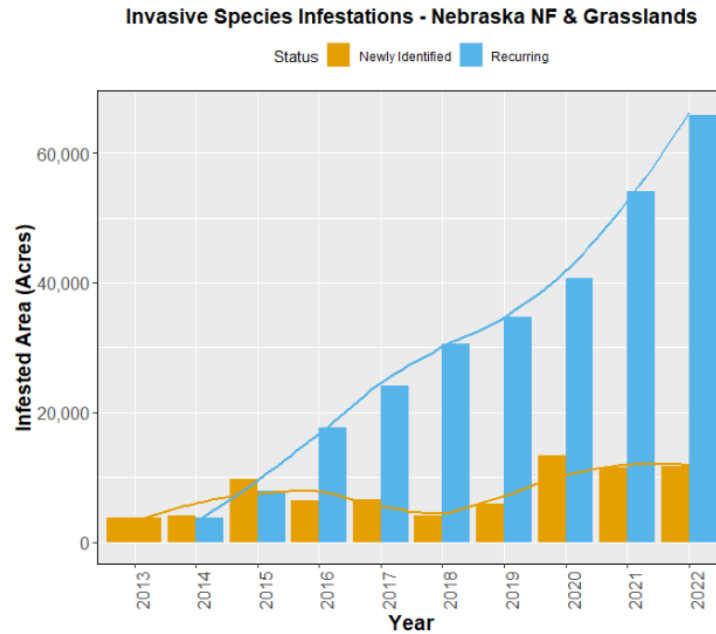


Figure 7. Total acres on infested on NNF&G with invasive species by year. New infestations detected each year contribute to the growth of already existing (recurring infestations). Lines represent best-fit smoothed trends over time.

The increase in infested areas could be attributed to either the quantity of surveys conducted (more area covered than in the past) or to an actual increase in the rate of invasive species spread. Treatments have trended upward over this same time period, with treatment intensity also generally mirroring the pattern of survey and detection annually.

- The Nebraska has been most successful in its approach to treating eastern redcedar. In the Samuel R. McKelvie National Forest, prescribed burning and removal of isolated, mature trees and saplings through cutting prevents the exponential spread seen in states south of Nebraska. At the Nebraska National Forest (east side), a combination of mechanical cutting and prescribed burning is holding encroachment steady, not necessarily getting ahead of the problem.



Photo: 17. Staff conduct a prescribed burn at the Samuel R. McKelvie National Forest.

Recommendations

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
MPL 1: To what extent has soil health and productivity been degraded by Forest Service management or permitted activities; and to what extent have degraded soils been restored?	<i>Overall trend cannot be determined from the data provided.</i>	None.
MPL 2: To what extent are noxious weeds, invasive species, and animal damage expanding or being reduced?	<i>Overall trend is away from target in the forest plan.</i>	Change the monitoring question to remove animal damage. Change management activities to include prevention, rapid detection and response, and wider variety of control methods.

Questions Not Addressed

Questions not addressed due to insufficient data:

- WS 3: Are Streams and Waterbodies protected from non-point source pollution sources?
- WS 5: To what extent have instream flows been assured to provide adequate water for stream channel maintenance, fisheries and other aquatic dependent plants and animals?
- FS 2: What is the status of pygmy nuthatch to assess the functional role of forested habitat?
- DC 7: To what extent are streams and riparian areas maintained at or trending towards Robust Stream Health, as defined by Region 2 FSH 2509.25?
- DC 8: To what extent are wetland ecosystems protected to maintain stable conditions supporting hydrologic function, hydric soils, and hydric vegetative communities?

Questions on a 5-year reporting cycle and not yet due for reporting:

- EC 1: Is habitat effectiveness on designated big game range being maintained or enhanced?
- EC 4: What is the status and trend of habitat to support the recovery of the American burying beetle on the planning unit?
- REC 2: Where does the demand for recreation opportunities warrant development of additional opportunities such as trails or campgrounds?
- REC 7: To what extent are the Soldier Creek Wilderness special features and communities of special concern conserved or enhanced?
- CC 1: How have extreme and average temperature and precipitation values changed across the Nebraska National Forests and Grasslands?

Summary of Results and Recommendations

Table 5. Monitoring questions, results, and recommendations.

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
WS 1: To what extent has the condition on watersheds containing National Forest System lands been restored, maintained or improved?	<i>Overall trend cannot be determined due to a lack of data.</i> Two rock boat ramps were installed, and 5.2 miles of stream were restored.	Revise forest plan objectives to set timeframes in which we specify how many watersheds are a priority. For example: "Designate three priority watersheds every five years."
WS 2: Are Streams and Waterbodies meeting State assigned Beneficial Uses and associated water quality criteria?	<i>Overall trend cannot be determined due to a lack of data.</i> Fifteen waterbodies or streams do not meet water quality criteria assigned to them, but their condition cannot definitively be attributed (or not) to activities on National Forest System lands.	Change monitoring indicators to focus on streams and waterbodies NOT meeting beneficial uses and water quality standards since this is what is reported by the states of Nebraska and South Dakota.
WS 4: To what extent have surface water, sub-surface flows, and aquifers been protected from contamination from abandoned wells?	<i>Overall trend cannot be determined from the data.</i> Forty-six wells have been registered as decommissioned with Nebraska and South Dakota since 1986. Field observations show it is likely that wells have been improperly abandoned.	Change management actions to create and maintain a current inventory of abandoned wells and develop a plan to decommission them. Require development of any new water sources to be coupled with proper decommissioning of another current or abandoned water source. Require contractors to register wells they decommission on behalf of the Forest Service. Change the monitoring plan to remove the indicator "instances of aquifer contamination" because the Nebraska does not collect data on aquifer contamination.

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
FS 1: What is the status of black-tailed prairie dog to assess the functional role of colony habitat?	<i>Overall trend is towards the target in the forest plan.</i> For the first time since monitoring began in 2005, acreage of habitat is within the desired range listed in the forest plan.	Revise the forest plan to include acreage objectives for all areas that have or could have prairie dog colonies to enable consistent comparison. Change the indicators in the monitoring plan to: historic and current extent of prairie dog colonies, and presence / absence of disease.
FS 3: What is the status of prairie grouse (plains sharp-tailed and greater prairie chicken) to assess the functional role of grassland vegetation habitat?	<i>Overall trend is away from the target in the forest plan.</i> Despite management activities geared towards improving habitat, numbers of prairie grouse on National Forest System lands in Nebraska is on the decline.	Change management activities to increase the rate of woody encroachment control, and provide grazing regimes that create a more dynamic, shifting, and heterogeneous habitat across the management units. Change the monitoring plan to include lek counts. Change the monitoring plan to include wing counts.
FS 4: To what extent has cooperative agreements and the landownership adjustment program been effective in reducing private land conflicts involving prairie dogs and enhancing long-term opportunities for development of prairie dog colony complexes in the priority National Grassland areas?	<i>Overall trend cannot be determined from the data provided.</i> The Forest Service has acquired minimal acreage since 2004.	Change the monitoring plan to remove this question, which is nearly impossible to answer.
EC 2: What is the status and trend of habitat to support the recovery of the black-footed ferret on the planning unit?	<i>Overall trend is towards the target in the forest plan.</i> Forest Service biologists located a new population of ferrets in the Fort Pierre National Grassland.	None.

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
EC 3: What is the status and trend of habitat to support the recovery of the blowout penstemon on the planning unit?	<i>Overall trend of blowout penstemon habitat extent and size is away from the target in the forest plan.</i> Moderate to conservative grazing on National Forest Systems lands has decreased the acreage of blowouts available as penstemon habitat.	Change the indicators in the monitoring plan to include number of populations introduced to new areas on and off National Forest System lands. Change management activities to increase the size and extent of blowouts.
REC 1: To what extent are trails managed to meet regional standards and to minimize conflicts among users?	<i>The Forest exceeded the goal listed for trail maintenance.</i> <i>The trend for conflicts among users cannot be determined.</i>	Change the monitoring plan to separate this into two questions.
REC 3: To what extent are Grassland and Forest visitors informed of the recreation opportunities available to them; are they adequately guided to those recreation opportunities; and do they receive adequate interpretive information on National Register of Historic Places and other heritage sites, geologic, palaeontologic, wildlife, plant, and recreation resources or opportunities?	<i>The Nebraska is moving towards the desired conditions in the forest plan.</i> Recreation staff continue to find creative ways to engage the public, especially capitalizing on virtual methods.	None.

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
REC 4: How well is the current road and trail network providing for public needs?	<i>For roads, the Nebraska is moving towards the objective in the forest plan.</i> <i>For trails, the trend cannot be determined from the data provided.</i>	Change the monitoring plan to include an indicator of outside funding obtained for road and trail maintenance. Change the monitoring question to read “road and motorized trail network”. Change the monitoring indicator to travel management changes and needs identified from public input or monitoring. Change management activities to use traffic counters to assess road and trail use more accurately.
REC 5: To what extent are traditional cultural properties being protected?	<i>The Nebraska has not identified any traditional cultural properties.</i>	Remove this monitoring question as the Nebraska has no traditional cultural properties.
REC 6: To what extent have the special features found in Special Interest Areas been conserved or enhanced?	<i>The overall trend is towards the target listed in the forest plan.</i>	Change management actions in the Quaking Aspen SIA to include disturbance. Change management actions in the Quaking Aspen, Bur Oak, and Mountain Mahogany SIAs to collect and sow seeds to expand populations, and create conservation stands. Change management actions in Toadstool Geologic Park to allow for more overnight camping (NEPA in progress).
REC 8: What are the effects of National Forest System management on adjacent communities?	<i>The Nebraska contributes direct and indirect jobs and labor income to the communities in which it is situated.</i>	None.

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
DC 1: To what extent are rangeland vegetation structure objectives being met?	<i>Overall trend is stable and not meeting the target in the forest plan. For the units reporting, moderate structure dominates the landscape.</i>	Change management actions to create variable stocking rates, intensity, and rotations to prevent the tendency to have uniform, moderate, grazing.
DC 2: To what extent are rangeland vegetation composition objectives being met?	<i>Overall trend varies by location whether it meets the target in the forest plan. The grasslands in the Sandhills appear vigorous and intact. The Fort Pierre National Grassland's native vegetation has declined and been supplanted by invasive grass species.</i>	Change the monitoring method at Bessey Ranger District to periodically include in-depth frequency of vegetation occurrence and percent cover.
DC 3: To what extent are desired vegetation conditions in forested areas being met?	<i>Overall trend cannot be determined from the data available.</i>	Change management activities to perform additional monitoring, specifically to implement a recurring Common Stand Exam survey, by visiting every Location ID once every 10-15 years.
DC 4: To what extent are the Red Shirt and Indian Creek Recommended for Wilderness special features and communities of special concern conserved or enhanced?	<i>Overall trend is away from the target in the forest plan.</i>	For Red Shirt, change management activities to close the creek crossing when conditions warrant and also prohibit agate collection.
DC 5: To what extent are National Register sites and districts being protected and preserved?	<i>Overall trend is towards the target in the forest plan. Repairs to the Hudson-Meng bison bonebed occurred. Bessey Nursery returned the pipe shed to its original use.</i>	None.
DC 9: To what extent have degraded streams, riparian areas, wetlands, and other waterbodies on National Forest System lands been restored?	<i>Overall trend is towards the target in the forest plan.</i>	None.

Monitoring questions	Progress towards desired conditions and objectives	Recommended actions
MPL 1: To what extent has soil health and productivity been degraded by Forest Service management or permitted activities; and to what extent have degraded soils been restored?	<i>Overall trend cannot be determined from the data provided.</i>	None.
MPL 2: To what extent are noxious weeds, invasive species, and animal damage expanding or being reduced?	<i>Overall trend is away from target in the forest plan.</i>	Change the monitoring question to remove animal damage. Change management activities to include prevention, rapid detection and response, and wider variety of control methods. An EIS is underway for these actions.