2024

MONTANA DEPARTMENT OF AGRICULTURE

Noxious Weed Seed Free Forage (NWSFF) Program

NWSFF Inspector Certification

TRAINING MANUAL

MONTANA DEPARTMENT OF AGRICULTURE

NWSFF Inspector Certification

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Section 1

Welcome to the Forage Program

History about the Forage Program

The 1995 Legislature passed the Montana Noxious Weed Seed Free Forage (NWSFF) Act because they realized the natural resources of the state need to be protected from noxious weeds and their seeds. The purpose of the Forage Act is to provide forage products that are free of "designated" noxious weed seeds or any injurious or propagating weed parts. Since the Forage Program began in 1989 certified forage numbers have steadily increased to an average of about 22,000 tons annually. Certified forage includes hay, straw, pellets, cubes, and grain. The Forage Program has also expanded the number of certified producers from across the state. Currently about 220 certified producers participate in the Forage Program annually. There are NWSFF Inspectors in almost every Montana county, because most of the inspectors are either a Montana State University (MSU) Extension agent or a county weed district coordinator.

NWSFF Act and Administrative Rules

In 1996 the Montana Department of Agriculture (MDA) was authorized and directed to implement the NWSFF Act (80-7-901, MCA) and adopt all necessary Administrative Rules (ARM 4.5.301). The NWSFF Administrative Rules provide a mechanism to standardize fees, inspection procedures, enforcement actions, and a forage marking system (twine, tags, labels). In 2021, the MT Legislature passed an amendment to the Forage Act that allows the Department to certify other materials such as gravel, mulch, compost, etc. The Department will create rules and training for each type of material to be certified when the need arises.

The Forage Act defines "Agent" as a person who is authorized or employed by the Department and is certified by the Department to conduct activities under the NWSFF Act. However, in this manual, brochures, booklets, and future correspondence; 'Agents' will be referred to as 'NWSFF Inspectors'. The reason for this title change is to reduce the confusion between MSU Extension agents and NWSFF agents.

The NWSFF Act and Administrative Rules are important knowledge that each inspector must know and understand, as well as to have a copy of the Act and Rules in the office. This manual will highlight the key parts of the Act; but it is up to the inspector to read and familiarize yourself with the entire NWSFF Act and Administrative Rules. The exam for this certification will cover components from the NWSFF Act and Administrative Rules.

Contact the Department of Agriculture if you have any questions about the NWSFF Act and Administrative Rules at 406-444-3140.

NWMAC (Noxious Weed Management Advisory Council)

An Advisory Council is appointed by the Director of the Montana Department of Agriculture (MDA). The purpose of this Council is to provide advice to the MDA for the administration of the program. The Advisory

Council is composed of ten voting members, including the MDA Director and several non-voting advisory members and agency representatives. The Council meets three times a year and also reviews Noxious Weed Trust Fund grant proposals and provides funding recommendations to the Director.

The members of the Advisory Council serve staggered two-year terms. There is no limit on consecutive terms. These members represent different geographical areas across the state and represent:

- Livestock Production Representative
- Ag Crop Production Representative
- Recreationist / Wildlife Representative
- Herbicide Dealer / Applicator
- Noxious Weed Free Materials Representative
- Weed Research & Control Representative
- Montana Weed Control Association Representative
- At-Large Member
- Western Montana Counties Representative
- Eastern Montana Counties Representative

For a current list of the NWMAC members please visit the following website at https://agr.mt.gov/Topics/N-P/Noxious-Weeds-Pages/NWTF/NWTF-Advisory-Council-page.

Section

2

Montana Certification of NWSFF Inspectors

When someone is interested in becoming an NWSFF Inspector, they need to complete an initial certification training course. This course consists of the following topics:

- NWSFF Act and Administrative Rules,
- Field inspection techniques and procedures,
- Map reading and forms used,
- Knowledge of weed management (burning, mowing, cutting or rogueing, mechanical methods, and chemicals)
- State and regional certification standards and guidelines,
- State and regional noxious and poisonous weed identification and training,
- Pass an exam with an 80% or better score.

Certification is valid for one growing season. All inspectors participating in the NWSFF program will receive an annual recertification email with any changes in Montana's program as well as any changes to the regional weed free forage program. Inspectors wishing to recertify, will be required to review this handbook and/or exam slides and take a quick recertification quiz. Once an inspector has taken an initial exam or the recertification quiz, they will be sent an NWSFF identification card prior to the growing season. Certified inspectors are considered agents of the Department while working with producers to inspect and certify forage.

NOTE: If an NWSFF Inspector intentionally falsifies the certificate of an inspection, that inspector may lose his/her certification.

Violations:

► for an inspector to falsify a certificate of inspection.

► for an inspector to improperly deposit, collect or use any certificate or inspection fees or fail to document and submit any required records to the Department of Agriculture.

Penalty matrix: 1st offense - $250, 2nd offense - $500, 3rd offense - $1,000

Section

3

Field Inspection Procedures and Requirements

Field Inspection Form

Any producer that would like to sell or bid certified weed free forage, must participate in the state certification program. The inspection process starts when the producer notifies you and requests a field inspection. The NWSFF Inspector is responsible for completing the top of the inspection form or the inspector can allow the producer to complete it. The following information must be completed:

- The date of the field inspection and estimated cut date - The date the producer will cut the hay field, which must be within 7 days of the inspection. If a producer is harvesting a grain field for certified straw, the harvest of the field needs to be done within 14 days after the field inspection.

- Producer name, email, address, and phone number. It is permissible to let the producer complete this section. Remember it is ***your responsibility to see that it is complete and legible.***

- Producer Signature – after completing the field inspection, review with the producer and obtain a signature.

- Permission to publicize in NWSFF Producer List – The Department of Agriculture is **required** to get the producer's permission to have their name and contact information on the Producer's List that the MDA maintains and posts to the website for consumers looking for certified forage.

- Producer number – If there is more than one NWSFF Inspector in the county, communicate with each other to avoid duplication of numbers assigned.

- Producer identification number – a three-digit number assigned to the producer by the Department or the field inspector and should be the same year after year. It includes the county number-producer number. Example: 15 – 007

- NWSFF Inspector Signature – Make sure **YOU**, the inspector, sign the form along with your NWSFF Inspector ID number and the county name or number where the inspection occurred.

The lower half of the Field Inspection Form must be completed by an NWSFF Inspector at the time of the inspection. The information about the field inspection is documented for each field unit on this part of the form. ***Field unit refers to the part of a field that may be certified or which has been certified***.

The NWSFF program relies on the inspector in the field to provide good and legible documentation on the field inspection form. Guidelines are provided below on how to complete the lower section of the Field Inspection Form:

- ☒ **Field Map:** draw the field that you are inspecting with key features of the field such as ditches, roads, fence lines, etc. along with outlining the areas that contain the noxious weed(s) or undesirable plants. This will help the producer know what areas to avoid when cutting the field. For large fields of straw, the NWSFF Inspector can attach a FSA (Farm Service Agency) map of the field. These maps are very accurate on field size and the NWSFF Inspector can use a highlighter to mark the inspected field boundary and any weedy areas.

- ☒ **Field Notes:** an area to document location of the field by using GPS or by using physical features. Make enough notes so that if the Department of Agriculture needed to locate the field 2 or 3 years after the field inspection, it could be done from this form. Also include which cutting of hay is being inspected, what weeds are present, any suggested management or buffers, etc. The NWSFF program needs good documentation.

- ☒ **Irrigated Field:** Indicate if the field being inspected is being actively irrigated by the producer.

- ☒ **Weeds Present:** Indicate the weed species that were found in the field or along the edge. Also indicate if there were ***no weed species*** present. It is important to note if the field is clean or if there are other weeds present in the field. Documentation is a key component to the NWSFF program.

- ☒ **Stack Yard/Bin Weed Seed Free:** The stack yards, storage sheds and/or bins must be inspected at the **same time** as the field and/or fields **prior** to stacking or filling them with certified forage. **NOTE:** ***Contaminated storage areas will not be approved for storage of certified forage or the certification will be cancelled if the area is contaminated with noxious weeds and/or noxious weed seeds.***

- ☒ **Field meets North American Standards and is NAISMA (nationally) Certified:** If a producer is selling hay out-of-state, they must be inspected to MT and NAISMA standards. If they are only selling/using hay in MT, they have the choice to be certified both state and nationally. Make sure to ask the producer prior to inspecting the fields where the hay will be used and if they would like to be certified in both. For reference, NAISMA listed weed species are on the back side of the Field Inspection Form). More information about the North American Standards is in Section 5.

- ☒ **Acres Inspected:** The number of acres in a field inspected for noxious and regional weeds. This is the number of acres used to calculate the inspection fee owed by the producer. ***This number is tracked by the Forage Program Coordinator to help determine annual program accomplishments.***

- ☒ **Acres Certified:** The number of acres with no noxious or regional weed seeds that meet certification standards. This number can be the same as Acres Inspected if no noxious or regional weeds were detected during the inspection. ***This number is tracked by the Forage Program Coordinator to help determine annual program accomplishments***.

- ☒ **Amount Due:** The dollar amount owed by the producer at the time of the field inspection (Acres Inspected x Inspection Fee of $4.50) or if the acres inspected is 10 acres or less the flat fee is $45.00.

- ☒ **Estimated Tons:** The **total** production tonnage from the acres certified. Make sure to ask the producer the number of tons of hay or straw the certified field will produce. ***This number is tracked by the Forage Program Coordinator to help determine annual program accomplishments.***

- ☒ **Forage Type:** The type of forage certified, which are classified as: alfalfa, alfalfa/grass, grass, sainfoin, and straw.

- ☒ **Bale Type:** The type of package the hay or straw is baled into, which are identified by the following: small square bales, large square bales, round bales, loose forage, and silage.

- ☒ **Marker Size:** The tensile size and length of the twine or tags- 170/9600, 240/6500, 400/4,000, 140/20,000

- ☒ **Marker Quantity:** Indicate how many boxes/rolls of twine were sold or the number of tags sold individually or by the bag (100 tags/bag). *Do not sell more markers than a producer can use in one season.* The reason for this is because a producer may participate in the Forage Program one year and then choose not to get his or her field certified the following year. A producer should not have a stockpile of NWSFF twine or tags to last two or three years. The Forage Program relies heavily on honest producers and not having excess NWSFF markers in the field. This helps keep the Forage Program's integrity.

- ☒ **Marker Due:** The dollar amount owed by the producer to purchase NWSFF twine or tags ($50/box, roll, or bag of tags (.50ea)).

- ☒ **Agent Mileage:** The Noxious Weed Seed Free Forage Administrative Rules allow an inspector to charge state mileage and per diem (see page 10) to the producer for these travel expenses. It is at the discretion of the inspector or county.

- ☒ **Total Paid:** The dollar amount from the fees collected for acres inspected plus the dollar amount from twine or tags purchased.

- ☒ **Check #:** The number from the producer's check he or she used to pay the total amount. If the producer pays in cash, please just write "Cash" instead of the check number.

The Field Inspection Form is a triplicate form. The white copy is for the producer, the yellow copy is for the NWSFF Inspector, and the pink copy is for the Department of Agriculture.

NWSFF Inspectors must make a request for Field Inspection forms to the Department of Agriculture. The NWSFF Program Coordinator is responsible for recording the sequentially numbered field inspection forms sent to each NWSFF Inspector. For more forms contact Jasmine Chaffee, jchaffee@mt.gov, 406-444-3140.

Conducting a Field Inspection

Field inspections can take an hour for 20 acres or several hours for larger acreage so plan to spend some time conducting the field inspection. A thorough inspection requires looking at the entire field. Make sure to always check the entire field even if you have been there before and no weeds were found; it doesn't mean new weeds did not find their way into the field. Drive-by-inspections are not allowed. Meet with the landowner prior to conducting an inspection and following the completion of the entire site. You can then answer any questions they may have concerning the requirements that are needed to meet the certification standards. Remember you are there to help the producer and be an educator as well as an inspector, the key to a good inspection is ***you***.

- ► Field inspections for hay must be made within 7 days prior to harvest.
- ► Field inspections for straw or grain must be made within 14 days prior to harvest.
- ► Fields that have been cut or harvested prior to inspections are **not eligible** for certification.

The producer may not want the entire field inspected for noxious weeds, so when a portion of a field is to be certified (**Field Unit**), it must be plainly marked or separated from the uncertified portion by a mowed strip or flagged at least 12 feet wide, to avoid cutting and mixing the certified and uncertified portion at harvest. Field units must include:

- surrounding ditches,
- fence rows,
- roads,
- easements,
- rights-of-way, and
- buffer zones of a minimum of 12 feet surrounding the outside edges of a field.
- If baling equipment is not cleaned prior to harvest the first three small square bales or the first large round or square bale from the field **cannot be certified**. Most producers make this an annual practice regardless of certification.

When you inspect the field, you need to be looking for Montana's 36 state listed noxious weeds along with nuisance weeds (black and wild mustards, Western salsify, kochia, field pennycress, etc.), county listed noxious weeds, and regional weeds if the producer will be selling the hay or straw out-of-state. Draw those weed infestation locations in the "Field Map" on the Field Inspection Form along with noting what vegetative stage the plant is in (vegetative, bud, flower). It is important to document for the producer what part of the field is certified versus non-certified. Make sure you mark the areas in the field that are **NOT** certified. Keep a roll of flagging tape with you when conducting a field inspection so you can flag the weed infested areas of the field. This will help the producer when harvesting or cutting the hay or grain field. The Department can provide flagging tape if requested.

There are several recognized patterns to travel that thoroughly cover an area for inspection purposes. However, following a zigzag pattern provides a thorough path to find noxious weeds; what pattern you choose is up to you and the shape of the field. It is helpful if you outline the path you choose on your field inspection form, for future reference and to provide better documentation for the producer and yourself. Walking the field is the preferred method since it is the most thorough and least damaging method of inspecting a field of hay.

In Montana, the standard range of tolerances for noxious weed seeds in certified forage is "zero" at the time of inspection. In terms of the Noxious Weed Seed Free Rules it is permissible (**however not recommended**) to have noxious weed plant(s) in the field that will be harvested or cut. You must make certain the plant(s) **cannot** produce a viable seed, nor reproduce vegetatively when cut, before it is harvested or cut for hay. Also, fields that appear weedy or unattractive or show poor crop practices, even though noxious weeds are not present, must not be certified under the certification standards. Do not certify fields that have cheatgrass (*Bromus tectorum*) or poisonous plants. Cheatgrass is a state regulated plant, which means it cannot be intentionally spread or sold in the state. You have the discretion and final say if the field can be certified. A producer can challenge this decision and petition the Department of Agriculture to assign another inspector to re-inspect the field. A second inspection fee will be assessed for this additional service.

Useful or needed items to take on a field inspection:

- Producer/landowner – **Always keep them involved!**
- Field Inspection Form
- Field map (Google, NRCS or FSA map)
- Smartphone (or a separate GPS Unit & Camera)
- Weed ID books (Montana's Noxious Weed ID booklet and some type of regional weed book, like *Weeds of the West*)
- Pen/pencil
- Surveyors' tape/ribbon or wire flags (whatever you use, make sure you have the approval of the landowner)
- Wear the appropriate clothing and shoes for the terrain you will be walking
- Equipment you may want to consider:
  - Sunglasses
  - Sunscreen
  - Bottled water
  - Gloves
  - Insect repellant
  - Binoculars
  - Rubber boots (for fields that have been recently irrigated or that will have a heavy dew in the morning)
  - Pocket knife/Leatherman tool or something similar
  - Allergy medicine
  - Bee sting kit
  - Snake chaps

Field Inspection Fees

NWSFF Inspectors are only allowed to charge the fees that are set by NWSFF Administrative Rule. Refer to the Montana Noxious Weed Seed Free Forage Act and Administrative Rule 4.5.313.

To keep inspections consistent across the state, the NWSFF Advisory Council has set the fee charged to the producer as follows:

- ✓ **$4.50/acre inspected** – certified acres may result in fewer acres due to an inspector finding areas of noxious weeds. Inspector keeps $2.25/acre inspected and the MDA will receive $2.25/acre inspected. Fees are collected for each inspection conducted through the season.

- ✓ **$45.00 – flat fee for fields of 10 acres or less**. Inspector keeps $22.50 and the MDA will receive $22.50.

- ✓ State mileage and/or per diem may also be charged to the producer by the NWSFF Inspector. Please follow the most current state rates here: https://doa.mt.gov/Travel-Information-Summary-December-2023.pdf

- ✓ If an additional inspection is required because the weather or other related problems delayed cutting hay within 7 days of the inspection or straw within 14 days of the inspection, the discretion of whether to charge an additional inspection fee will be left to the NWSFF Inspector.

Collect the fees at the time of the field inspection or by special arrangements made for payment through a written agreement. If the fee is not paid or a producer improperly pays any fee or assessment under the provision of 80-7-921, MCA, (Penalty for Nonpayment of Fees) the Department of Agriculture or its authorized inspector will not provide further services.

Government inspectors (MSU Extension Agents, County Weed District Coordinators, etc.) must deposit the fees collected in an appropriate government account. You must be able to track and account for the dollars you collect from the producers. **Your records** must include:

1. NWSFF Inspector name and ID number,
2. Names of each producer and documentation of the fees paid,
3. The total dollar amount of fees collected,
4. The dollar amount owed to the MDA ($2.25/acre inspected or $22.50 for 10 acres or less plus any twine or marker sales),
5. The dollar amount retained by the NWSFF Inspector (fees that are collected and retained should be used to support NWSFF activities in the county), and
6. All records to be kept in accordance with generally accepted accounting principles.
7. Submit the **Season End Report** (form provided by MDA) by **September 30** then the Department of Agriculture will send you an invoice for its portion of the field inspection fees.

Non-government inspectors (private contractors) will be employed as a seasonal short-term employee at the Department, only when necessary and another local government agent cannot conduct inspections. All fees and forms collected must be submitted to the Department of Agriculture in a timely manner.

Certified Forage ID Markers

Approved markers are used to identify certified forage and are required by the Department of Agriculture. NWSFF Inspectors can only request the approved markers from the Department. The costs of the markers are as follows:

- $50/box or roll of twine. The twine is orange and blue in color and is available in the below types:
  - 9600/170 # for small square balers
  - 6500/240 # for small square balers
  - 4000/400 # for big square balers
  - 20,000/140 # for round bales balers

- $50/bag of tags (100 tags with unique ID number on each tag)

Tags – approved marker

Twine – approved marker

If the producer uses twine:

Only one strand of the colored twine is required per bale sold along with a **completed** transportation certificate.

If the producer uses tags:

A tag is required on each bale of certified forage sold along with a **completed** transportation certificate.

Section

4

Understanding Transportation Certificates

NWSFF Inspector's Responsibility

The NWSFF program uses Transportation Certificates to communicate authenticity of certification between the producer and the consumer buying the certified forage. As the inspector you need to:

1. Record the following information on the Transportation Certificate –
   a. Producer name and ID number,
   b. Your name and inspector ID number,
   c. The Field Inspection Form number and year of certification, and
   d. Type of certification – Montana or regionally certified forage.

2. Keep the pink copy of the Transportation Certificate for your records.

3. Instruct the producer to completely fill out the remainder of the Transportation Certificate before giving the buyer the original (white copy).

   All bales must be identified individually using a department issued identification marker (twine or tags). A completed transportation certificate is required and must specify whether the forage was inspected for Montana or regional noxious weeds.

Certified Producer's Responsibility

It is the responsibility of each producer to make sure that all certified NWSFF forage sold under the program is properly marked and identified with Transportation Certificates before it leaves the producer's premises. As the producer, he or she needs to:

1. Sign the Transportation Certificate,
2. Collect buyer's information (name and address),
3. Identify the certified product being sold –
   a. Forage type (alfalfa, alfalfa/grass, grass, straw, etc.),
   b. Marker type (twine, tags – need tracking numbers),
   c. Tonnage transported or number of bales transported, and
   d. Package type (small, medium, large square or round bales).
4. Vehicle Operator/Driver's Signature – the Transportation Certificate must be signed by the driver of the vehicle upon receipt of the certified forage.

Second and Third Party Sales

Bales or bulk forage sold by a producer to a second party (retail outlets, such as feed stores, Murdoch's, Big R, etc.) for resale must be accompanied by the original Transportation Certificate. The second party (retail outlet) will need to photocopy the original Transportation Certificate and provide the photocopy plus a receipt of the certified baled forage purchased to the third party buyers (their customers). Please take a few minutes to explain this to producers that intend to sell their certified forage to a retail outlet for resale to a third party buyer. **The third party buyer must have the photocopy of the Transportation Certificate and the receipt (to show where the certified forage was purchased) in their possession when they are transporting or storing forage in a restricted area (public lands).**

Example of a Transportation Certificate (form will be pre-numbered).

MONTANA DEPARTMENT OF AGRICULTURE -- PO BOX 200201 -- HELENA, MT 59620 -- (406) 444-7819

Montana Noxious Weed Seed Free Forage (NWSFF)
TRANSPORTATION CERTIFICATE

T 12431

This forage meets the Noxious Weed Seed Free Forage requirements of:
☐ Montana Department of Agriculture ☐ North American Weed Free Forage Standards

CERTIFIED PRODUCER INFORMATION:

Name: _____

Producer ID Number: MT - _____

Producer's/Seller's Signature: _____

NWSFF INSPECTOR INFORMATION:

Name: _____ ID #:_____

Field Inspection Number: _____Year:_____

BUYER INFORMATION:

Name: _____

Address: _____

CERTIFIED FORAGE INFORMATION:

Forage Type: ☐ Alfalfa ☐ Alfalfa/Grass
☐ Grass ☐ Sainfoin ☐ Straw

Package Type of Forage: _____

Marker Type: ☐ Twine ☐ Tags
Tag #s:_____ to _____,
_____ to _____

Tonnage Transported: _____ ***OR***

Number of Bales Transported: _____

Date of Sale: _____

Vehicle Operator/Driver's Signature:_____ (*must be signed upon receipt of certified forage*)

**Third party buyer: a person that buys certified hay or straw from a retail/feed store needs a photocopy of the original transportation certificate from the store and receipt of purchase when transporting or storing NWSFF certified forage in restricted areas.*

The white copy is to be given to the buyer, the yellow stays with producer, the NWSFF inspector keeps pink for record. 6/14

White original: to the producer's customer (buyer).
Yellow copy: for the producer's records.
Pink copy: for the NWSFF Inspector's records – necessary for trace back cases.

Section

5

North American Weed Free Products

Introduction

There is a growing demand in North America for the use of certified weed free forage and mulch as a preventative program in integrated weed management systems to limit the spread of noxious weeds. The goal of this standard is to provide a guideline to set minimum requirements for uniform participation of the various Canadian provinces and states in the program.

The North American Standards are designed to:

- Provide some assurance to all participants that forage certified through this program meet a minimum acceptable standard.
- Provide continuity between the various provinces and states in the program.
- Limit the spread of noxious weeds through forage and mulch.

National Certification

Montana participates in the North American Invasive Species Management Association (NAISMA) Certified Weed Free Products Program. This provides the opportunity to transport certified forage products across state and national boundaries where noxious weed restrictions are in effect. The unification of standards, guidelines, and inspection forms enhances marketing and distribution of certified forage products between member states and Canadian provinces. The Weed Free Products Program uses the same orange/blue twine as MT and the participating states have their own versions of tags that meet the minimum requirements for certification markers.

If a field is inspected and it meets the North American Standards certification, make sure you indicate that status on the Field Inspection Form and the Transportation Certificate in the appropriate boxes. Also, refer to the back of the Field Inspection Form for a check list of Montana and NAISMA listed noxious weeds.

Most states and federal agencies follow NAISMA standards through an MOU and training provided by the Association. NAISMA offers minimum standards for other products including gravel, mulch, and compost.

Additional Listed Weeds

A field certified to Montana standards must not contain seeds or propagating parts from the 36 state listed noxious weeds. For a field to be NAISMA certified the field needs to be inspected for an additional 30 noxious weeds or undesirable plants.

 NAISMA Listed Weeds that are commonly found in Montana.

Weeds that have been reported in Montana.

Absith wormwood (*Artemisia absinthium*) – a herbaceous, perennial plant with fibrous roots. The stems are straight, growing tall (2 – 3 feet), grooved, branched, and silvery-green. The leaves are spirally arranged, greenish-grey above and white below, covered with silky silvery-white hairs.

Austrian fieldcress (*Rorippa austriaca*) – a perennial herb in the mustard family which grow from 1 to 3 feet tall. The flowers are formed on racemes. They have four yellow petals and are 1/8 inch diameter. The leaves are alternately arranged on the stems and are simple. Lower leaves with petioles and large teeth or lobed margins and middle to upper stem leaves have toothed to smooth margins.

Black henbane (*Hyoscyamus niger*) – a nightshade family plant that can be an annual or biennial, 1 to 3 feet tall. Leaves are coarsely-toothed to shallowly lobed and pubescent. Foliage has a foul odor. Flowers are brownish-yellow with a purple center and purple veins. Black henbane contains alkaloids which have caused occasional livestock poisoning and is also considered a poisonous plant to humans.

Buffalobur (*Solanum rostratum*) – a species of nightshade, an annual that forms a tumbleweed. Individual plants reach 3 – 5 feet tall, leaves are deeply lobed and covered with spines. Flowers are yellow and develop into a spiny seed capsule.

Caucasian bluestem (*Bothriochloa bladhii*) – Also called Australian bluestem and Australian beardgrass. Height to 2-3 ft. tall, green to purple, long, thin panicle flowers; June to August. Leaves are flat or bent outward, smooth, with a noticeable midrib. When crushed, the leaves smell like turpentine. Found in roadsides and pastures; prefers heavy, dry soils.

Common Burdock (*Arctium minus*) – a biennial plant, that can grow 1 to 5 feet tall and forms multiple branches. Burdock can be distinguished by its extremely large, heart-shaped leaves that are very hairy on the undersides. Flowers are enclosed in a prickly bur and are pink to lavender in color.

Common crupina (*Crupina vulgaris*) – a winter annual in the sunflower family. The fleshy leaves of the rosette are oval-shaped, with the widest part near the tip, and have distinct purple midribs. Alternate stem-leaves become smaller toward the stem apex. One to five narrow flowers develop on branch tips.

Common mullein (*Verbascum thapsus*) – this biennial produces a large, thick rosette of fuzzy leaves the first year and a single stout, erect stem, 2 to 6 feet tall, the second year. Flowers are sessile, borne in long terminal spikes, sulfur yellow, 5-lobed and more than an inch in diameter.

Common teasel (*Dipsacus fullonum*) – a taprooted biennial which grows to 6 feet tall. Leaves are conspicuously veined, with stiff prickles on the lower midrib. Stem leaves lanceolate up to 10 inches long. Flowers are purple, borne in dense heads, each flower subtended by spine-like bractlets. Involucral bracts at the base of the head are generally longer than the head.

Cutleaf teasel (*Dipsacus laciniatus*) – a herbaceous perennial that grows as a basal rosette its first year. From its second year on, it sends up flowering stalks that can reach 6 to 7 feet in height. Opposite leaves are joined at the base and form cups that surround the prickly stem. Tiny, white flowers subtended by stiff bracts

densely cover the oval flower heads. The floral bracts at the base of the head are generally longer than the head and wider than common teasel.

Dame's rocket (*Hesperis matronalis*) – a tall, showy, short-lived perennial in the mustard family. First year plants develop into rosettes and second year flowering plants send up an erect, 2-4 foot tall flower stem. Leaves on the stem are pointed and lance-shaped, 2-6 inches long, wider at the base, and attached alternately along the stem. Each flower is 4-petaled, with colors on different plants ranging from purple or pink to white.

Field scabious (*Knautia arvensis*) – this plant is a simple perennial that forms a deep tap root and a large, basal rosette. Sturdy, erect stems are produced that branch sparingly at the top of the plant. The upper leaves are oppositely arranged and sessile. They are deeply and pinnately lobed into narrow, finger-like segments. The entire plant is covered with short, stiff hairs. Small flowers are located in dense heads at the ends of long branches. The flowers may vary from pink to pale purple or even blue.

Horsenettle (*Solanum carolinense*) – is not a true nettle, but a member of the nightshade family. It is a perennial herbaceous plant that has hard spines along the stems that can penetrate the skin and break off, causing much pain. Leaves are alternate 2 – 5 inches long, and each is irregularly lobed. Both surfaces are covered with fine hairs.

Johnsongrass (*Sorghum halepense*) – a plant in the grass family that reproduces by rhizomes and seeds. The foliage can cause 'bloat' from the accumulation of excessive nitrates and if foliage becomes wilted from frost or hot dry weather it can contain sufficient amounts of hydrogen cyanide to kill cattle and horses if it is eaten in quantity.

Jointed goatgrass (*Aegilops cylindrica*) – a winter annual grass, 15 to 30 inches tall with one to many erect stems or tillers. It is now established in most winter wheat growing areas of North America, spread as a seed contaminate or by custom combiners. Jointed goatgrass has a similar appearance and is closely related to winter wheat. The two will cross to form a hybrid.

Meadow knapweed (*Centaurea pratensis*) – a perennial plant up to 3 ½ feet tall. Basal leaves are up to 4 inches long, slender, have a petiole, and may be entire, toothed, or lobed. Stems are many branched and tipped by a solitary flower head up to 1 inch wide. Flower head bracts are ¼ inch wide, and the tips range from a comb-like fringe to a blunt ruffled edge.

Musk thistle (*Carduus nutans*) – a biennial plant in the sunflower family. Plants overwinter in the rosette stage, sending up a multi-branched flowering stem in mid spring of their second year and can grow 6 feet tall or more. The fleshy taproot is hollow near ground surface. Flower heads are terminal, solitary, 1 ½ to 3 inches in diameter, and usually bent over or nodding.

Perennial sowthistle (*Sonchus arvensis*) – a perennial in the sunflower family, spreading from horizontal rhizome-like roots. Plants are usually 2 to 4 feet tall, succulent, and exude a milky juice when injured. Leaves have a clasping base and mildly prickly margins and rich yellow flower heads up to 2 inches wide. It is common in gardens, cultivated crops, and areas where adequate water is available.

Plumeless thistle (*Carduus acanthoides*) – a plant that can grow up to 8 feet in height and can form weedy monotypic stands. The leaves are very deeply lobed, narrower than musk thistle, and very pubescent underneath. Flower heads are small (1/2 to 1 inch) but very numerous.

Poison hemlock (*Conium maculatum*) – a herbaceous biennial plant that grows between 6 to 8 feet tall. Stems are erect, hollow and purple spotted with distinct ridges and extensively branched. All plant parts are poisonous but once the plant is dried, the poison is greatly reduced, although not gone completely.

Puncturevine (*Tribulus terrestris*) – a taprooted herbaceous perennial plant that grows as a summer annual in colder climates. The leaves are opposite and pinnately compound with four to eight pairs of oval, hairy, half-inch long leaflets. The 'goat-headed' shaped capsules have two sharp spines that can cause bicycle flats, reducing the recreational use of many areas.

Quackgrass (*Agropyron repens*) – a very common perennial species of grass with creeping rhizomes. It has flat, hairy leaves with upright flower spikes. Quackgrass leaves are often an M-shaped constricted near the leaf tips allowing for identification of vegetative stages. Other key features are the small, claw-like auricles, hairy sheaths on lower leaves, and white rhizomes with brow bracts.

Scentless chamomile (*Matricaria perforata or M. milaceum*) – an annual, biennial, or short-lived perennial plant. Leaves are alternate, fernlike, finely divided, and odorless when crushed. The stems can reach 6 inches to 3 feet tall and have numerous branches. Small, daisy-like heads are found singly at the ends of the branches. Each head has tiny yellow disk flowers in the center surrounded by flat, white ray flowers.

Scotch thistle (*Onopordum acanthium*) – a biennial plant that grows up to 12 feet tall. A large rosette of spiny leaves the first year with a fleshy taproot. Upper leaves are alternate and spiny, often covered with white hairs and deeply lobed with long, stiff spines along the margins. The fine white hairs give the plant a grayish appearance.

Sericea Lespedeza (*Lespedeza cuneata*) – a perennial plant in the legume family with branching stems reaching a maximum height around six feet. It grows from a woody taproot and is topped with a woody caudex. The fruit is a legume pod containing one seed.

Squarrose knapweed (*Centaurea virgata*) – plants are long-lived perennials and can grow 1 ½ to 3 feet tall. Flower cluster are small with 4 to 8 rose to purple colored flowers. Squarrose knapweed is often confused with diffuse knapweed, but it is a true perennial, its bracts are recurved, its seed heads fall off the stem soon after the seeds mature, and its seed has hairs (pappus), while diffuse knapweed seed is hairless. The taproot allows this weed to thrive in dry sites so it may be more invasive than diffuse knapweed in ultra-dry rangeland.

Wild oats (*Avena fatua*) – it is a typical oat in appearance, a green grass with hollow, erect stems 1 to 4 feet tall bearing nodding panicles of spikelets. This species is distinguished from domestic oats by the twisted awn which bends at right angles and a horseshoe-shaped scar at its seed base. Seed can remain dormant in the soil for as long as 10 years, making it difficult to eliminate once established.

Wild proso millet (*Panicum miliaceum*) – an annual grass, 2 to 6 feet tall, with erect stems that branch at the base. Leaf blades are hairy, ligule is a fringe of dense hairs 1/16 inch long that are fused at the base.

Spikelets are 2-flowered, the upper floret is fertile, the lower is sterile. Seeds are smooth, shiny, olive brown to black. Seedlings can often be identified by the attached seed on the roots.

Yellow bluestem (*Bothriochloa ischaemum*) – Perennial, clump-forming, small, blue-gray grass, with flowering stems up to 4 ft. tall. Leaf blades are yellow-green, flat or folded, usually smooth. Leaf sheaths are rounded. The nodes may be smooth or with short hairs. Blooms late June to July, earlier than native bluestems. The inflorescence is silvery, reddishpurple. Found near disturbed roadsides, in pastures, and even in high-quality prairie and glade habitats.

Ventenata (*Ventenata dubia*) – Winter annual grass, also called wire grass, that is 6-18 inches tall and often grows alongside cheatgrass in range, pasture, roadsides, and agricultural fields. It is non-toxic but it is not palatable to livestock or wildlife and decreases the value, yield, and crop quality. It has a very shallow root system, open panicle, very little leaf matter with long ligules, and bent/twisted awns. When growing it has a fuzzy, or shinny appearance on the landscape.

REFERENCES:

Colorado Department of Agriculture. 2014. Noxious Weed Species (http://www.colorado.gov/cs/Satellite/ag_Conservation/CBON/1251618874438 , March 13, 2014). Lakewood, CO.

Food and Agriculture Organization of the United Nations. 2014. Grassland Species Profiles. (http://www.fao.org/ag/agp/AGPC/doc/Gbase/data/pf000318.htm, March 13, 2014)

Idaho's Noxious Weeds. 1999. Idaho OnePlan (www.oneplan.org/crop/noxweeds/, March 17, 2014). The University of Idaho. Twin Falls, ID.

New Invaders of the Northwest, 2010. University of Idaho Extension, Moscow, ID

Weeds of the Prairies, 2000. Alberta Agriculture and Food Information Packaging Center, Edmonton, Alberta.

Weeds of the West, 9th Edition. 2000. Western Society of Weed Science. Newark, CA

Wikipedia, the free encyclopedia. 2013. (http://en.wikipedia.org, March 13, 2014)

Section 6

Certification of Processed Forage Products

Grain, Pellets, Cubes and Other

Certifications of processed forage products as noxious weed seed free are **ONLY** available through the Montana Department of Agriculture office in Helena, MT. If you have people interested in certifying any of the above products, please direct them to contact Jasmine Chaffee, NWSFF Program Coordinator, at 406-444-3140.

The processed products include:

- **Grain concentrates (oats, barley, etc.):**
  Whole grains are certified under the Montana NWSFF program in two methods. First, the grain from a certified NWSFF field may be labeled as such. Second, the certification of mechanically cleaned grains from non-certified fields can be labeled and sold as Montana NWSFF. However, the facility is required to have an annual inspection conducted.

- **Forage cubes:**
  Must use certified NWSFF.

- **Processed pellets:**
  Pellet processing plants can use certified or non-certified material to produce pellets. Pelleting procedures from non-certified material require grinding the forage with a specific screen size (6/64 inch), which is then re-pelleted using a temperature of at least 140 degrees Fahrenheit or greater. If the source of forage is certified, there is not a requirement to use the grinding, steam, or temperature requirement. However, a minimum of 500 pounds of pellets that is to be certified must pass through the system including the pelleter to purge the system when using certified forage material for the pellets. This first 500 pounds cannot be considered as certified.

- **Straw wattles:**
  Must use certified NWSFF.

- **Out-of-state cubes and pellets:**
  Any certified product shipped into the state must meet all of Montana's certification requirements along with paying for an MDA inspector to conduct a pellet plant inspection. The Department of Agriculture, upon request of any person for Montana certification of their pellets, cubes or their bulk forage, may enter into agreements with other state Departments of Agriculture or other appropriate state agencies or Canadian provinces to verify if the pellets, cubes or bulk forage meet Montana NWSFF certification standards.

Processing plants that produce bagged NWSFF certified forage are required to attach an approved label showing proof of certification of the contents. Each label has a unique number in case MDA needs to conduct a trace back on a bagged product. Certified processing facilities can only purchase the approved labels from the Department of Agriculture.

Section 7

Enforcement Authority and Prohibited Acts

Stop Sale, Use or Removal Order

When the Montana Department of Agriculture (MDA) has reasonable cause to believe any lot of certified NWSFF is in violation of the Noxious Weed Seed Free Forage Act and Administrative Rules, it can enforce a written order requiring the person holding the forage not to sell, use or remove the forage in any manner until written permission is given by MDA.

In order for forage to be considered "Montana Certified" the forage must be approved through an MDA approved certification process. Someone cannot simply say their forage is "certified" or use similar language that could lead a buyer into believing the forage is Montana Noxious Weed Seed Free Forage, when it is not.

County Embargo

The County Weed District Board has the ability (Montana County Weed Control Act and Administrative Rules, 7-22-2124, MCA) to establish a special embargo program for the movement of forage into or out of the county to reduce the spread of noxious weeds. An embargo can be implemented after confirmation of a violation, such as forage that has not been certified by the state and is being sold as noxious weed seed free. A person in possession of forage that is subject to this type of embargo cannot transport or sell the forage until written permission is obtained from the County Weed District Board. The forage may be released from the embargo if the Weed Board:

1. Verifies the guaranteed delivery back to the original producer,
2. Approves burning or disposal of the forage, or
3. Approves other alternatives.

The person in possession of the forage subject to the embargo has 30 days to comply with the conditions approved by the Weed Board.

Required Use of Certified Products

All forage products (mulches, erosion control barriers, bedding materials, livestock feed, etc.) and seeds used for reclamation purposes by public utilities and local, county (fairgrounds), state, or federal agencies **MUST** be certified as noxious weed seed free.

Appendix A: Field Inspection Form

INSPECTION #

5638

MONTANA CERTIFICATION
NOXIOUS WEED SEED FREE FORAGE
Field Inspection Form

Producer's Signature: _____ **Telephone #:** _____

Email Address: _____ **Inspection Date:** _____

Producer's Name & Address: **(Mailing)**

_____

_____

_____

Permission to publicize in NWSFF Producer List:
O YES O NO

Producer Identification Number: _____ **Est. Cut Date:** _____
Producer #

Inspector Signature: _____ **Inspector ID:** _____ **County:** _____

The PRODUCER is responsible for notifying the INSPECTOR at least 7 days in advance of forage harvest or 14 days for straw.

FIELD MAP

Field Notes: (location / inspector comments)

Irrigated field?
O Yes O No

MT noxious weeds present:

NAISMA noxious weeds present:

Other weeds present:

_____*refer to back of form for weed check list*_____

NORTH

Stack Yard/Bin
O Approved O Not Approved

Field is NAISMA certified?
(see back of form)
O Approved O Not Approved

Acres Inspected: _____
$4.50/A inspected, $45.00 min.

Acres Certified: _____

Amount Due: $_____

Estimated Tons: _____

Forage Type: _____

Bale Type: _____

Marker Size: _____

Marker Quantity: _____

Marker Due: $_____

Inspector Mileage (if applicable):
State per diem **$**_____

TOTAL PAID $_____
(non-refundable)

Check # _____

Appendix B: MT Noxious Weed List

Effective: June 2019

PRIORITY 1A These weeds are not present or have a very limited presence in Montana. Management criteria will require eradication if detected, education, and prevention:

(a) Yellow starthistle (*Centaurea solstitialis*)
(b) Dyer's woad *(Isatis tinctoria*)
(c) Common reed *(Phragmites australis ssp. australis)*
(d) Medusahead *(Taeniatherum caput-medusae)*

PRIORITY 1B These weeds have limited presence in Montana.
Management criteria will require eradication or containment and education:

(a) Knotweed complex (*Polygonum cuspidatum, P. sachalinense, P. × bohemicum, Fallopia japonica, F. sachalinensis, F. × bohemica, Reynoutria japonica, R. sachalinensis, and R.× bohemica*)
(b) Purple loosestrife (*Lythrum salicaria*)
(c) Rush skeletonweed (*Chondrilla juncea*)
(d) Scotch broom (*Cytisus scoparius*)
(e) Blueweed (*Echium vulgare*)

PRIORITY 2A These weeds are common in isolated areas of Montana. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by local weed districts:

(a) Tansy ragwort (*Senecio jacobaea, Jacobaea vulgaris*)
(b) Meadow hawkweed complex (*Hieracium caespitosum, H. praealturm, H. floridundum, and Pilosella caespitosa*)
(c) Orange hawkweed (*Hieracium aurantiacum, Pilosella aurantiaca*)
(d) Tall buttercup (*Ranunculus acris*)
(e) Perennial pepperweed (*Lepidium latifolium*)
(f) Yellowflag iris (*Iris pseudacorus*)
(g) Eurasian watermilfoil (*Myriophyllum spicatum, Myriophyllum spicatum x Myriophyllum sibiricum***)**
(h) Flowering rush (*Butomus umbellatus*)
(i) Common buckthorn *(Rhamnus cathartica L.)*
(j) Ventenata *(Ventenata dubia)*

PRIORITY 2B These weeds are abundant in Montana and widespread in many counties. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by local weed districts:

(a) Canada thistle (*Cirsium arvense*)
(b) Field bindweed (*Convolvulus arvensis*)
(c) Leafy spurge (*Euphorbia esula*)
(d) Whitetop (*Cardaria draba, Lepidium draba*)
(e) Russian knapweed (*Acroptilon repens, Rhaponticum repens*)
(f) Spotted knapweed (*Centaurea stoebe, C.maculosa*)
(g) Diffuse knapweed (*Centaurea diffusa*)
(h) Dalmatian toadflax (*Linaria dalmatica*)
(i) St. Johnswort (*Hypericum perforatum*)
(j) Sulfur cinquefoil (*Potentilla recta*)
(k) Common tansy (*Tanacetum vulgare*)
(l) Oxeye daisy (*Leucanthemum vulgare*)
(m) Houndstongue (*Cynoglossum officinale*)
(n) Yellow toadflax (*Linaria vulgaris*)

(o) Saltcedar (*Tamarix spp*.)
(p) Curlyleaf pondweed (*Potamogeton crispus*)
(q) Hoary alyssum (*Berteroa incana*)

PRIORITY 3 Regulated Plants: (NOT MONTANA LISTED NOXIOUS WEEDS)
These regulated plants have the potential to have significant negative impacts. The plant may not be intentionally spread or sold other than as a contaminant in agricultural products. The state recommends research, education and prevention to minimize the spread of the regulated plant.

- Cheatgrass (*Bromus tectorum*)
- Hydrilla (*Hydrilla verticillata*)
- Russian olive (*Elaeagnus angustifolia*)
- Brazilian waterweed (*Egeria densa*)
- Parrot feather watermilfoil (*Myriophyllum aquaticum or M. brasiliense*)