

RESOLUTION OF THE TOWN COUNCIL, TOWN OF MOUNTAIN VILLAGE, COLORADO
TO ESTABLISH A NOXIOUS WEED MANAGEMENT PLAN
FOR THE TOWN OF MOUNTAIN VILLAGE

RESOLUTION NUMBER: 2012-0816-16

WHEREAS, in 1996 the General Assembly of the State of Colorado found and declared that certain undesirable plants constitute a present threat to the continued economic and environmental value of the lands of the State and if present in any area of the State, must be managed; and

WHEREAS, Counties and municipalities are to appoint advisory commissions to develop undesirable plant management plans, considering the elements of integrated weed management, seeking those methods which are least environmentally damaging and which are practical and economically reasonable; and

WHEREAS, San Miguel County Board of County Commissioners appointed a County Weed Advisory Board and adopted a Noxious Weed Management Plan and in 2002; and

WHEREAS, the Mountain Village Town Council acts as the advisory commission for undesirable plants in Mountain Village and has found that noxious weeds threaten valuable wildlife habitat and natural resources in the community; and

NOW THEREFORE, be it resolved that the Town Council of the Town of Mountain Village, hereby adopts the Mountain Village Noxious Weed Management Plan, dated August 16, 2012 attached hereto.

TOWN OF MOUNTAIN VILLAGE



Robert Delves, Mayor

ATTEST:



Jackie Kennefick, Town Clerk

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**TOWN OF MOUNTAIN VILLAGE
NOXIOUS WEED MANAGEMENT PLAN
AUGUST 2012**

I. INTRODUCTION

The Colorado Weed Management Act was signed into law on May 7, 1990. The Act was revised and in 1996 and is now known as the "Colorado Noxious Weed Act". The Act (CRS 35-5.5-101, et. seq.) was designed to ensure that all the lands of the State of Colorado, whether in public or private ownership, be protected by and subject to the jurisdiction of a local government empowered to manage undesirable plants as designated by the State of Colorado and the local governing body.

The General Assembly of the State of Colorado found and declared that certain undesirable plants constitute a present threat to the continued economic and environmental value of the lands of the State and if present in any area of the State, must be managed. Counties and Municipalities are directed to appoint advisory commissions to develop undesirable plant management plans, considering the elements of integrated weed management, seeking those methods which are least environmentally damaging and which are practical and economically reasonable.

In 2002 San Miguel County adopted a Noxious Weed Management Plan for all unincorporated land within the county and appointed a County Weed Advisory Board made of landowners and managers who are residents of the unincorporated portions of San Miguel County; information about this document and Board can be found on the County website at www.sanmiguelcounty.org.

The following Mountain Village Noxious Weed Management Plan is intended to complement the existing State and County noxious weed regulations, by encouraging landowners to address noxious weeds on their property, educating landowners about correctly identifying weeds and knowing their characteristics, and bringing continuity to noxious weed control strategies and regulations throughout the region.

II. NOXIOUS WEED LISTS

The Act states that certain undesirable plants constitute a threat to the continued economic and environmental value of the land in Colorado, and if present in any area of the state must be managed by the landowner. The State list of plant species that are appointed as noxious weeds are designated by rule. In 2003 the State law was amended to classify noxious weeds into categories for immediate eradication, containment, and suppression to further assist the State in coordinating efforts to stop the spread of noxious weeds. The State adopted new rules in 2004 for the administration and enforcement of the State Noxious Weed Law and designated certain weeds as List A, B, or C for the purpose of determining control strategies. The Act and more information on noxious weeds in Colorado can be found on the state's website at www.colorado.gov/ag/weeds.

III. TOWN OF MOUNTAIN VILLAGE NOXIOUS WEED PROGRAM

The Town of Mountain Village Director of Environmental Services has among his/her duties the responsibility of addressing the state statutory requirements for identification and management of noxious weed concerns within the Town of Mountain Village. “Noxious Weed” as defined in the Mountain Village Noxious Weed Management Plan shall mean those plants designated in the Colorado Noxious Weed Act. For the purposes of this Noxious Weed Management Plan, “noxious weed” means an alien plant or parts of an alien plant that has been designated by rule as being noxious or has been declared a noxious weed by the Air Quality and Natural Resource Commission of the State of Colorado, and meets one or more of the following criteria:

1. Aggressively invades or is detrimental to native plant communities;
2. Is poisonous to wildlife;
3. Is a carrier of detrimental insects, diseases, or parasites;
4. The direct or indirect effect of the presence of this plant is detrimental to the environmentally sound management of natural ecosystems.

DEFINITIONS

ANNUAL means a plant whose root dies yearly.

BIENNIAL means a plant which lives two years.

COMMISSIONER means the Commissioner of the Colorado Department of Agriculture.

CONTAINMENT means maintaining an intensively managed buffer zone that separates infested regions, where suppression activities prevail, from largely uninfested regions, where suppression activities prevail, from largely uninfested regions, where eradication activities prevail.

ERADICATION means reducing the reproductive success of a noxious weed species or specified noxious weed population in largely uninfested regions to zero and permanently eliminating the species or population within a specified period of time. Once all specified weed populations are eliminated or prevented from reproducing, intensive efforts are to continue until the existing seed bank is exhausted.

INFESTED ACREAGE means an area of land containing a noxious weed species, defined by the actual perimeter of the infestation as delineated by the canopy cover of the plants and excluding areas not infested.

LIST A means rare noxious weed species that are subject to eradication wherever detected statewide in order to protect neighboring lands and the state as a whole.

All populations of List A species in Colorado are designated by the Commissioner of Agriculture for eradication. It is a violation of State rules to allow any plant of any population of any List A species to produce seed or develop other reproductive propagules. Prescribed management techniques (see

www.colorado.gov/ag/weeds) must be applied to every population of List A noxious weeds present in Colorado to achieve the following objectives:

- A. The plants of every population of List A species must be eradicated prior to seed development.
- B. Once all mature plants are eliminated, appropriate efforts must be made to detect and eliminate new plants arising from seed, reproductive propagule, or root stock for the duration of the seed longevity for the particular species.
- C. In order to ensure that seeds or other reproductive propagules are not produced or spread, any plant with flowers, seeds, or other propagules must be placed in sealed plastic bags and disposed of by:
 - 1. High intensity burning in a controlled environment that completely destroys seed viability;
 - 2. Removal of plant materials to a solid waste landfill which covers refuse daily with six inches of soil or alternative material; or
 - 3. Any other method approved by the Commissioner.

Within one year of detection, any local governing body with a population of any List A species must provide to the State Weed Coordinator mapping data pertinent to each population including:

- A. Species name
- B. Population location(s) including distribution and abundance
- C. Estimated infested acreage

LIST B means noxious weed species with discrete statewide distributions that are subject to eradication, containment, or suppression in portions of the state designated by the State in order to stop the continued spread of these species.

LIST C means widespread and well-established noxious weed species for which control is recommended but not required by the State, although local governing bodies may require management.

NOXIOUS WEED shall mean those plants as designated in the Noxious Weed Management Plan.

PERENNIAL means a plant whose root remains alive more years than two.

POPULATION means a group of designated noxious weeds of the same species occupying a particular geographic region and capable of interbreeding.

RESTORATION means the removal of noxious weed species and reestablishment of desirable plant communities on lands of significant environmental or agricultural value in order to help restore or maintain said value.

SUPPRESSION means reducing the vigor of noxious weed populations within an infested region, decreasing the propensity of noxious weed species to spread to surrounding lands, and mitigating the negative effects of noxious weed populations on infested lands. Suppression efforts may employ a wide variety of integrated management techniques.

LIST A NOXIOUS WEED SPECIES- 2012 (Please note this list changes from time to time based on Department of Agriculture determinations. Please check state website at www.colorado.gov/ag/weeds for updates, pictures and descriptions of List A species.)

African rue, *Peganum harmala*
Bohemian knotweed, *Polygonum bohemicum*
Camelthorn, *Alhagi pseudalhagi*
Common cuprina, *Crupina vulgaris*
Cypress spurge, *Euphorbia cyparissias*
Dyer's woad, *Isatis tinctoria*
Elongated mustard, *Brassica elongata*
Giant knotweed, *Polygonum sachalinense*
Giant reed, *Arundo donax*
Giant salvinia, *Salvinia molesta*
Hydrilla, *Hydrilla verticillata*
Japanese knotweed, *Polygonum cuspidatum*
Meadow knapweed, *Centaurea pratensis*
Mediterranean sage, *Salvia aethiopsis*
Medusahead, *Taeniatherum caput-medusae*
Myrtle spurge, *Euphorbia myrsinites*
Orange hawkweed, *Hieracium aurantiacum*
*Purple loosestrife, *Lythrum salicaria*
Rush skeletonweed, *Chondrilla juncea*
Squarrose knapweed, *Centaurea virgata*
Tansy ragwort, *Senecia jacobaea*
Yellow starthistle, *Centaurea solstitialis*

As required by the State Act and supported by the TMV Noxious Weed Management Plan, Weeds in List A are designated as noxious weeds which must be eradicated by integrated management techniques prescribed by the state (see the state website at www.colorado.gov/ag/weeds for pictures, descriptions, and prescribed weed management techniques.)

LIST B NOXIOUS WEED SPECIES- 2012 (Please note this list changes from time to time based on Department of Agriculture determinations. Please check state website at www.colorado.gov/ag/weeds for updates, pictures and descriptions of List B species).

Abisinth wormwood, *Artemisia absinthium*
Black henbane, *Hyoscyamus niger*
Bouncingbet, *Saponaria officinalis*
Bull thistle, *Cirsium vulgare*
*Canada thistle, *Cirsium arvense*
*Chinese clematis, *Clematis orientalis*
Common tansy, *Tanacetum vulgare*
Common teasel, *Dispacus fullonum*
Corn chamomile, *Anthemis arvensis*

Cutleaf teasel, *Dipsacus laciniatus*
 *Dalmation toadflax, broad-leafed, *Linaria dalmatica*
 Dalmation toadflax, narrow-leafed, *Linaria genistifolia*
 *Dame's rocket, *Hesperis matronalis*
 *Diffuse knapweed, *Centaurea diffusa*
 Eurasian watermilfoil, *Myriophyllum spicatum*
 *Hoary cress, *Cardaria draba*
 *Houndstongue, *Cynoglossum officinale*
 Leafy spurge, *Euphorbia esula*
 Mayweed chamomile, *Anthemis cotula*
 Moth mullien, *Verbascum blatteria*
 *Musk thistle, *Carduus nutans*
 *Oxeye daisy, *Chrysanthemum leucanthemum*
 Perennial pepperweed, *Lepidium latifolium*
 Plumeless thistle, *Carduus acanthoides*
 Quackgrass, *Elytrigia repens*
 Russian knapweed, *Acroptilon repens*
 Russian-olive, *Eleagnus angustifolia*
 Salt cedar, *Tamarix chinensis*, *T. parviflora*, and *T. Ramosissima*
 *Scentless chamomile, *Matricaria perforata*
 Scotch thistle, *Onopordum acanthium*
 Scotch thistle, *Onopordum tauricum*
 *Spotted knapweed, *Centaurea maculosa*
 Spurred anoda, *Anoda cristata*
 *Sulfer cinquefoil, *Potentilla recta*
 Venice mallow, *Hibiscus trionum*
 Wild caraway, *Carum carvi*
 Yellow nutsedge, *Cyperus esculentus*
 *Yellow toadflax, *Linaria vulgaris*

List B weed species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, develops and implements state noxious weed management plans designed to stop the continued spread of these species. (See the state website at www.colorado.gov/ag/weeds for pictures, descriptions, and prescribed weed management techniques).

LIST C NOXIOUS WEED SPECIES - 2012 (Please note this list changes from time to time based on Department of Agriculture determinations. Please check state website at www.colorado.gov/ag/weeds for updates, pictures and descriptions of List C species.)

Bulbous bluegrass, *Poa bulbosa*
 Chicory, *Cichorium intybus*
 *Common burdock, *Arctium minus*
 Common mullein, *Verbascum thapsus*
 Common St. Johnswort, *Hypericum perforatum*
 *Downy brome, *Bromus tectorum*
 *Field bindweed, *Convolvulus arvensis*
 Halogeton, *Halogeton glomeratus*

Johnsongrass, *Sorghum halapense*
Jointed goatgrass, *Aegilops cylindrical*
*Perennial sowthistle, *Sonchus arvensis*
Poison hemlock, *Conium maculatum*
Puncturevine, *Tribulus terrestris*
*Redstem filaree, *Erodium cicutarium*
Velvetleaf, *Abutilon theophrasiti*
Wild proso millet, *Panicum miliaecum*

List C weed species are species for which the Commissioner, in consultation with the state noxious weed advisory committee, local governments, and other interested parties, will develop and implement state noxious weed management plans designed to support the efforts of local governing bodies to facilitate more effective integrated weed management on private and public lands. The goal of such plans will not be to stop the continued spread of these species but to provide additional education, research, and biological control resources to jurisdictions that choose to require management of List C species. (See the state website at www.colorado.gov/ag/weeds for pictures, descriptions, and prescribed weed management techniques.)

*In accordance with the Town of Mountain Village Noxious Weed Management Plan, these plants have been found in Mountain Village and are declared a threat to the economic and environmental value of the land within the Town, and no owner, tenant or agent should allow any such plant growth to occur on any lot, block, or parcel of ground, including those areas adjoining public rights-of-way, and must eradicate, contain or suppress their growth and not allow any plants, seeds, etc. to escape from one property to another, as determined by their classification as these terms are defined in this Plan.

IV. PROGRAM GOALS AND OBJECTIVES

The goals and objectives of the Town of Mountain Village with respect to weed management within the municipality include the following:

- A. Develop and carry out a comprehensive noxious weed control program on all Town-owned property with the goal of reducing and eliminating the use of chemicals where possible.
- B. Carry out sufficient measures, including project oversight and enforcement, as may be necessary to ensure the eradication of List A species and populations of List B species designated for eradication by the State, using the least toxic controls reasonably possible.
- C. Establish an educational program, using identification pamphlets, mailings and hosting educational seminars that will effectively communicate weed management information to the landowners, land managers, design review boards, and other stakeholders in the Town of Mountain Village.
- D. Identify non-informed or negligent landowners who are not carrying out weed management programs on their property and provide technical support for establishing weed management plans for the eradication of List A species and populations of List B species designated for eradication and enforce local regulations requiring compliance to ensure that State designated noxious weed species are managed as necessary in the least toxic manner possible.

- E. Work with state and federal agencies, San Miguel County, and private landowners including TSG Ski & Golf Resort, through intergovernmental and other agreements, to establish effective weed management programs on their properties which are located within the town.
- F. Identify areas infested with noxious weeds through inspections and observations and track them internally and with annual reports and mapping provided by San Miguel County Weed Management Program.
- G. Produce regular community publications and website pages that will inform Mountain Village residents of noxious weeds and their appropriate management.
- H. Maintain contact with County officials regarding noxious weed designations and management.
- I. Ensure that weed control activities on private property that is visited/used by the public, such as in the Village Center and Meadows area, is properly noticed and signed per regulations in the Code and is performed in the least toxic manner possible.
- J. Organize community weed pulling activities and events in conjunction with other weed control methods.
- K. Establish a certification and enforcement program for local landscapers to ensure noxious weed species are not used in local landscape designs.
- L. Promote, encourage and incentivize non-toxic means of weed control throughout the community.

V. CODE ENFORCEMENT AND NOTICE TO LANDOWNERS

According to the Mountain Village Noxious Weed Management Plan, the Town has the authority with regard to private lands within the municipality to inspect and to notify the landowner or occupant of the presence of noxious weeds.

The Town Representative shall have the right to either enter upon or conduct a visual inspection from adjacent lands of any premises, lands, or places whether public or private, during reasonable business hours for the purpose of inspecting for the existence of noxious weed infestations, when at least one of the following has occurred:

- i) The landowner or occupant has requested an inspection (enter upon);
- ii) A neighboring landowner or occupant has reported a suspected noxious weed infestation and requested an inspection (visual inspection only);
- iii) An authorized agent of the Town has made a visual inspection from a public right-of-way or area and has reason to believe that a noxious weed infestation exists (visual inspection only); or
- iv) The San Miguel County Weed Manager or State Weed Office agent has inspected a current aerial satellite map of the property and determined there is a reason to believe that a noxious weed infestation exists (visual inspection only).

After such inspections, the Town shall notify the property owner. The notice will name the noxious weeds present, advise the landowner or occupant to manage the noxious weeds according to their classification, and specify the best available control methods of integrated management. Where

possible, the Town will consult with the affected landowner or occupant in the development of a plan for the management of the noxious weeds.

The landowner's responsibility in regard to receiving notice of the presence of noxious weeds is to comply with the terms of the notification within 10 days or acknowledge the terms of the notification and submit a written management plan which includes a schedule for the completion of the plan. The Town will review the plan within 10 days of receipt. If the plan is rejected by the Town, the landowner may request additional time to consult a Weed Management Specialist or Weed Scientist at the landowner's expense, to convene with the landowner and the earliest opportunity and develop a management plan that will be delivered to the San Miguel County Weed Manager and/or Advisory Board for review. If the plan is again rejected by the Advisory Board, the landowner may request an appearance before the Town Council. The decision of the Town Council is final.

Please note that the Town of Mountain Village strongly supports the implementation of non-chemical, non-toxic, noxious weed control methods when reasonably possible to prevent potential impacts to native vegetation, wildlife, soils or water quality in the alpine environment. Chemical controls should only be used when other, less harmful weed management methods are found not to be successful or reasonably possible. The various methods of weed control are listed in Section VII of this Plan.

VI. DESCRIPTIONS OF DESIGNATED NOXIOUS WEEDS known to occur in Mountain Village:

a. CANADIAN THISTLE (*Cirsium arvense*)- member of the "High Country Three":



Canadian Thistle is probably the most common and adaptive plant in all of Mountain Village. It can survive at elevations at over 11,000 feet and is a common colonizer of disturbed areas. Canadian thistle has leaves that range from blue green to green and from slightly hairy to smooth but always with sharply pointy tips and purple to white flowers. It is a rhizomatous perennial spreading both by numerous seeds and by an extensive root system. It is more obvious in late summer when the seeds fly away in puffs of white. Plants are 5-24 inches tall and always occur in patches due to root spread. Control of Canadian thistle can be achieved by

repeated digging of the plants to prevent root spread and by cutting or mowing to prevent seed production.

b. **OX EYE DAISY (*Chrysanthemum leucanthemum*)- member of the “High Country Three”:**



Oxeye Daisy is one of Mountain Village’s worst escaped ornamental plants. Oxeye is a native plant in Eurasia, not Telluride, but was included for many years in “wildflower” seed mixtures and was sold in Colorado until the late 1990’s when it became illegal to do so. Oxeye is a rhizomatous perennial plant that reproduces both by a spreading root system and heavy seed production. It is a common and very detrimental invader of Colorado’s high country, riparian areas and roadsides. The area around Mountain Village and Telluride appears to be particularly suitable to this invader. It is not palatable to wildlife or domestic animals and as it spreads, particularly along streams, it greatly reduces the native and desirable plants that do provide food for our abundant wildlife.

Oxeye daisy is easily confused with its more benign cousin, the Shasta daisy. Oxeye blooms much earlier than Shasta and the plants are not nearly as handsome or robust. Shasta does not spread readily from seed or root. There are two methods for eradicating the Oxeye daisy. It can be hand pulled repeatedly at the first sign of growth including pulling as much of the root as possible or herbicide may be applied for large infestations. If herbicide is to be applied, please be sure to use only a licensed herbicide applicator and the least toxic product available.

c. **YELLOW TOADFLAX (*Linaria vulgaris*) - member of the “High Country Three”:**



Yellow toadflax is easily recognized by its yellow snapdragon-like flowers with bright orange throats. It is commonly called “butter-and-eggs” and was once sold as a native wildflower but is actually native to Europe, not North America. Plant size ranges widely from 3 inches to 2 feet, depending on age of plant and nutrient availability. Leaves are narrow, bright green and 2-4 inches long. It is one of the more common and aggressive invaders of pristine areas above 8,000 feet and has been found at over 11,000 feet in elevation here in Mountain Village. It is a rhizomatous perennial, meaning that it spreads both by roots and seeds. Root systems may be several feet deep and several feet across. Originally planted as an ornamental it long ago escaped cultivation. Yellow toadflax is a particularly difficult plant to remove once it is established, but control can be achieved over time through repeated digging in an attempt to exhaust the root system.

d. **HOUNDSTONGUE (*Cynoglossum officinale*):**



Houndstongue is a biennial that grows from 1-4 feet tall. Reproduction is through numerous flat, round seeds that are like Velcro when attached to fur or clothing. It was brought to the United States from Europe, probably on animals or as a contaminant in crop seed. Houndstongue is toxic, producing an alkaloid that causes liver cells to stop reproducing. It is common on the Uncompahgre Plateau but uncommon throughout the rest of the area. It produces basal leaves that are long, blue-green and narrow. In its second year it produces a pretty reddish/purple flower before making the seeds mentioned above. When in small quantities, houndstongue can be controlled by digging the plants out of the ground and removing from the area, especially if flowers are already present. Gloves should be worn when handling this plant to avoid toxicity.

e. **WHITETOP (*Cardaria draba*):**



Commonly known as Hoary cress, is a creeping perennial that is a member of the mustard family and native to Europe. Hoary cress plants can spread rapidly and one plant can produce from 1200 to 4800 seeds. A single plant can eventually form a large colony, producing a dense monoculture that can crowd out native species. In the absence of a competitor, a single plant can spread over an area 12 feet in diameter in one year. The key to effective control of Hoary Cress is prevention. Prevent invasions by limiting seed dispersal, which could include mowing several times before the plants bolt stresses the plant and forces the plant to use nutrient reserves stored in the root system.

f. **SULFUR CINQUEFOIL (*Potentilla recta*):**



Sulfur cinquefoil is a perennial forb that is native to Eurasia. Sulfur Cinquefoil is unpalatable to grazing animals and is avoided for the most part. The low preference is believed to be a result of a high concentration of phenolic tannins (acidity) in the leaves and stems. The plant has a long life span and twenty year old plants are not uncommon. Properly identifying sulfur cinquefoil is imperative, since it resembles the native cinquefoil plants. Hand pulling or digging this plant when infestations are small and the soil is moist, is effective if you can pull up most of the root system. Mowing is not effective as new shoots will replace the cut stems.

g. **CHINESE CLEMATIS (*Clematis orientalis*):**



Chinese Clematis is a member of the buttercup family and a non-native herbaceous to woody vined perennial with yellow flowers. A deciduous climber with stems 10-15 feet long, this species can cause death to young trees and brush; out competing native shrubby and herbaceous species. Chinese clematis is an escaped ornamental species native to Eurasia that looks like our native clematis which has groups of small white flowers. Plants will completely cover rock walls, trees, bushes and fences. The juice of freshly crushed leaves and stems have blister casing agents. Hand pull or dig plants when soils are moist, make certain to pull all the roots and bag specimens to not scatter seeds when flowering.

h. **DALMATION TOADFLAX (*Linaria genistifolia*, *Linaria dalmatica*):**



Dalmation toadflax, a member of the figwort family, was introduced from Europe and is a perennial reproducing readily from seed and underground root stocks in Western Colorado. Plants are 2-3 feet tall and produce numerous bright yellow flowers resembling those of snapdragon. Leaves are blue green, fleshy and the lower leaves clasp the stem of the plant- although closely related the appearance is very dissimilar to the more common yellow toadflax. It is very uncommon in this area but has been found in ornamental plantings at several locations and along state highways and county roads. This plant is an A list species in San Miguel County and must be controlled wherever found. Control of small populations can be achieved by digging the root out- at least 6 inches below the soil surface. Large populations may require herbicide applications; if herbicide is to be applied, please be sure to use only a licensed herbicide applicator and the least toxic product available.

i. **SPOTTED KNAPWEED (*Centaurea maculosa*):**



Spotted knapweed is a non-native biennial or short-lived perennial member of the sunflower family (Asteraceae) that reproduces primarily by seed production. It reproduces only by seed and can grow to a height of 1-3 feet tall, with a pinkish-purple flower usually at the end of branches. Native to Eurasia it was introduced in 1890's as a contaminant in alfalfa or hay seed. A prolific seed producer, Spotted Knapweed can produce up to 40,000 seeds per plant. Once established, this plant will reduce wildlife forage by outcompeting native species. Seed production must be prevented to control this plant. Digging must occur when the soil is moist and all of the taproot and lateral roots must be removed. Mowing at full bloom will stress but

not kill the plant, and bag and destroy cut plants as seeds remain viable even after cutting. Biological controls for this plant may be available.

j. **DIFFUSE KNAPWEED (*Centaurea diffusa*):**



Diffuse knapweed is a non-native biennial forb and a member of the sunflower family that reproduces solely by seed. During the first year of growth diffuse knapweed appears as a rosette in spring or fall. During the second year in mid to late spring, the stem bolts, flowers, sets seed, and the plant dies. Once the plant dries up, it breaks off at ground level and becomes a tumble weed which disperses the still viable seeds over long distances. The plant grows to 1 ½ to 2 feet tall, with flowers that are mostly white and sometimes lavender. A prolific seed producer, diffuse knapweed can produce up to 18,000 seeds per plant. The key to effective control is preventing the plant from going to seed. Biological controls may be available. Any method that severs the root below the soil surface will kill diffuse knapweed. Mowing or chopping is most effective when plants are at full bloom. Be sure to properly dispose of flowering cut plants, since seeds can mature and become viable even after the plant is cut down.

k. **SCENTLESS CHAMOMILE (*Anthemis arvensis*):**



Scentless chamomile is member of the sunflower family that is native to Europe and was introduced into North America in the late 19th century. It is an annual plant that grows 6-30 inches tall, with flowers that are white with yellow center. Leaves alternate and are fern or feather-like. This plant has a bushy appearance with stems erect and smooth. This plant reproduces only by seed, and the buried seed can be viable in the soil for up to 15 years. Can sometimes be confused with Oxeye Daisy but those weeds have a much broader leaves and bigger flowers. Hand pulling can be an effective control method for small infestations of

scentless chamomile but might not be practical in larger patches. Mowing in early season before seed production will reduce populations.

I. DAMES ROCKET (*Hesperis matronalis*):



Dame's Rocket was a common component in many "wildflower mixes" until a few years ago and is now showing up in Telluride and Mountain Village areas. It has potential to be a serious invader of riparian areas so is important to control before it reaches the San Miguel River and its tributary streams. Dame's Rocket is usually about 36 inches in height with broad, dark green leaves and pretty lavender to magenta flowers. It is a long lived, deep-rooted perennial plant. It is recommended that Dame's Rocket be removed by digging below the deepest roots, this maybe up to 18 inches deep. Flowering plants must be disposed of by being placed in a leak proof container and sent to the dump or burned. This is an ornamental plant that has escaped cultivation and become problematic and we urge all landowners to choose another pretty plant that is not noxious for their gardens.

Please contact the San Miguel County Weed Manager or refer to the state website for additional site and plant specific recommended management methods.

VII. NOXIOUS WEED MANAGEMENT METHODS

Integrated weed management methods should be used in managing the weed species listed in this plan. Integrated management means the planning and implementation of a coordinated program utilizing a variety of methods for managing noxious weeds, the purpose of which is to achieve specified management objectives and promote desirable plant communities within the landscape.

Integrated management techniques include education, prevention, and control measures including cultural, mechanical, biological, and chemical control. For the purposes of this plan, the following definitions are used for the control measures. Management of the various noxious weeds will vary depending upon the site where the weed is located.

Early Detection and Rapid Response is a strategy utilized in weed control that emphasizes detecting and controlling new, invasive weed while the populations are localized and small enough to be eradicated. Costs for EDRR are typically far less than the cost of containing and managing vast populations of weeds. Total eradication of newly detected noxious weeds prevents the growth and spread of unmanageable populations, protecting wildlife, water quality, and the environment.

Correctly identifying weeds and knowing their characteristics is central to developing early detection and prevention strategies. Consult your Town or County weed control staff to obtain useful weed identification booklets and guides.

The selection of an appropriate management program will depend on: weed species, intended use of the land, effectiveness of the control methods, length of time required for control, availability of bio-control agents, environmental considerations, and relative cost of the control methods.

Implementing an integrated weed management plan includes: 1) preventing encroachment into uninfested areas; 2) detecting and eradicating new species; 3) containing large-scale infestations 4) controlling large-scale infestations using an integrated approach; and 5) revegetation if necessary.

INTEGRATED WEED MANAGEMENT TECHNIQUES

*** Please check the state and county management plans for guidelines and recommendations of site and species specific weed management techniques.**

1. **Prevention** is the best form of weed control. Revegetation of disturbed areas using certified weed free seed and certified weed free mulch will help prevent weed infestations. Other preventative methods include but are not limited to cleaning earthmoving equipment and use of top soil that is not infested with noxious weeds.
2. **Physical Control** intentionally disrupts the growth of weeds through cultivation, mowing, hand pulling, hoeing, flooding, and burning. All of these measures, administered correctly, can be useful when used in conjunction with other control methods. When physical control is used alone, it rarely has a positive long term effect due to the survivability of noxious weeds. Physical control may make the problem worse through spreading seed or plant parts and by eliminating the desirable competitive species on site. Physical control is usually very effective on annuals and biennials if it is done prior to seed production.
3. **Cultural Control** involves methods conducted to favor the growth of desirable plants over undesirable plants. These practices include, but are not limited to, proper grazing, fertilization, irrigation, seeding and vigorously growing competitive desirable plant species, maintaining an optimum density and spatial arrangement in an area, and planting species most suited to an area. Cultural control is an excellent preventative measure for noxious weeds.
4. **Biological Control** involves the release of beneficial organisms such as fungi, insects, sheep, goats, cattle, rusts, pathogens, parasites, and diseases to diminish weed seed production, increase plant stress, and limit the expansion of underground parts of the plant's reproductive system. Amending

the soil with holistic soil supplements will make improve soil health and make soil more able to withstand noxious weed invasions and grow quality native vegetation. The Colorado Department of Agriculture has an insectary in Palisade, Colorado and the insects are free to State residents. Before acquiring some of these insects, contact an insectary representative to ensure a successful program.

Chemical Control involves the application of EPA-registered herbicides that are effective on target noxious weed species based on the best scientific facts and current technology. All herbicide applications must be done according to the label for each individual product. The choice of herbicides and application rates that are used should be the least environmentally damaging as determined by information currently available and the product label. Herbicides should be used only when other, less toxic means of weed control are insufficient or inappropriate.

No recommendations or requirements in this plan concerning the use of herbicides are intended to contradict or supercede any other federal, state or local law regulating herbicide use. All use of herbicides to achieve any management objectives specified in this plan must comply with all applicable federal, state and local legal requirements, including but not limited to compliance with all directions for use, cautionary statements and any other requirements in the labeling of the particular herbicide product. Note: If pesticide is to be applied, please be sure to use only a licensed pesticide applicator.

An integrated weed management program should be evaluated each year to determine whether or not the program is successful in achieving the objectives of the program. This allows land managers to make appropriate changes to ensure the success of their weed management program.

REVEGETATION

Land that has been disturbed such as roads, building sites, utility lines, etc. should be revegetated to help prevent the infestation of noxious weeds. Areas where weed infestations have been controlled or eradicated should be revegetated to increase competition and prevent new infestations.

Intended use, soils, precipitation, temperature, management objectives, and establishment characteristics determine selection of desirable plant species to be used for revegetation. Another important consideration is the ability of desired species to withstand invasion. For example, many desirable non-native and native species have been shown to reduce noxious weed infestations. Weed management must be done on an annual basis.

WETLANDS and WATERWAYS

Wetlands form an important part of the ecological setting within the Mountain Village and surrounding region and support a diverse variety of life. The Town has a responsibility to protect wetlands from degradation and impacts to water quality. Great care must be taken if applying herbicides to lands near or around wetlands. The following guidelines should be followed if using herbicide within 100 feet of wetlands or other waters of the United States:

- Non-herbicide controls shall be used before any chemical treatment in areas within 20 feet from wetlands or other waters.
- In areas within 20 feet of wetlands or other waters, all herbicides shall be hand-applied using dabbing or discontinuous spray application devices held within 6 inches of the ground surface.
- Herbicides shall not be applied when there is a high priority of rain or high winds to avoid impacts to wetlands or other waters.
- In wetlands or other waters, or areas within 20 feet of them, only the minimum recommended doses of herbicide shall be used.

PUBLIC NOTICING AND SIGNAGE REQUIREMENTS FOR CHEMICAL CONTROL METHODS APPLIED TO PUBLIC LANDS AND THOSE PRIVATE LANDS USED BY THE PUBLIC

When Chemical control methods are being applied to lands used by the general public, whether owned by public or private entities, the Property Owner shall take all reasonable measures to inform the public when chemical control applications are taking place.

These measures shall include but are not limited to: 1) Signage placed in the area of treatment at least one day in advance of the chemical applications and also during the entire day of application; 2) For large applications public notice shall be placed in the newspaper in addition to signage; and 3) chemical control information shall be placed on the website or other means of communication available to property owner.

MANAGEMENT PLAN FOR INFESTED PROPERTIES

For each weed species on a property a specific control strategy should be selected. This is what will be implemented by the property owner as their management plan. If the weed has infested different habitat types such as forest, riparian, wetland, etc. the appropriate control method for each area should be selected. A sample Landowner Noxious Weed Management Plan is provided in Appendix A. State prescribed management techniques for List A, B and C species and Watch List species can be found on the Colorado State Department of Agriculture website at www.colorado.gov/ag/weeds or contact the San Miguel County Weed Manager.

VIII. EVALUATION OF PROGRAM

The annual goals and the plan of work will be reviewed and evaluated at the end of every year and will include any proposed additions or changes in the plan of work for the following year. Any additions or changes to the resolution regulating noxious weed management must be recommended by the Director of Environmental Services and approved by the Mountain Village Town Council.

The Town of Mountain Village Noxious Weed Management Plan shall be reviewed by the Town and amended, as needed, at least every three years.

In the event that voluntary compliance with the Town of Mountain Village Noxious Weed Management Plan has not provided sufficient results in controlling noxious weeds, the Town Council

shall consider an Ordinance making compliance with the Noxious Weed Management Plan mandatory, including fines, penalties and the right to abate such noxious weeds on private property by the Town.

For more information about managing noxious weeds on your property, please contact the Town or County weed control staff.

APPENDIX A: LANDOWNER WEED MANAGEMENT PLAN

1. Name:
Mailing Address:
City, State, ZIP:
Phone:
Email:

2. Site Address:
Legal Description:
Parcel Number:

3. Brief Description of land and current use(s):

4. Future plans for the land:

5. Description of noxious weed infestation.
 - a. Weed species b. Acres/SF Infested or c. Percent Infested

 - d. Specific location of infestation(s) on site (wetland, forest, garden, landscaping, etc.)

6. Management Plan for site:
 - a. Methods to be used to keep the noxious weeds from going to seed that will also reduce amount of infestation. Describe for each identified species.

 - b. Implementation schedule of identified methods of control.

 - c. Anticipated duration of management plan (1 yr., 3 yr., 5 yr.)

I agree to follow this Noxious Weed Management Plan and acknowledge that failure to manage the noxious weeds on my property may result in corrective actions by the Town of Mountain Village.

Landowner Signature:

Date:

Plan Approved By:

Date: