Nez Perce Bio-Control Center

2003 End of Year Report
to the
Idaho State Department of Agriculture Cost Share Program

Technology Transfer Workshop crew near Soda Springs, ID June 2003

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Introduction

The Nez Perce Bio-Control Center (NPBC) received grant funds from the Idaho State Department of Agriculture (ISDA) in 2003 to continue development and provide ongoing maintenance to the biocontrol release database serving the State of Idaho.

Project Accomplishments

The database proposal was funded by ISDA Cost Share funds and by the NPBC. The objective for the project was to: Manage the Biocontrol agent release data and spatial display relationships and maintain a web site to make the information available to a wider audience. The NPBC utilized the funds to cover 50 percent of a staff biologist/database manager. To date (12/22/03), over 1,600 individual release sites were entered in the database and work continues with the Tribe's GIS Department to develop an efficient method for creating enhanced spatial displays (maps). Reports and maps of bio-control agent distribution have been provided to private and public land manager users upon request. For all counties that bio-control agent releases occurred, an annual report in hard copy form was developed and provided to each respective weed superintendent at the Idaho Weed Control Supervisor Association held in February 2003. During the meeting the county weed superintendents voted to receive the reports electronically. In response to their desire, the NPBC sent all the weed superintendent recipients a report in electronic form by the end of February. All reports generated for the weed superintendents will continue to occur in January and will be distributed electronically.

The NPBC with assistance of the University of Idaho conducted bio-control workshops throughout the state to increase awareness and use of biological control organisms for weed control. In these workshops, each participant was provided with bio-control agents and release forms/user guide and were encouraged to use them to document their agent releases. The bio-control release forms were developed by the NPBC in 2002 and are based on national standards. All standardized agent release information obtained by the NPBC are entered and stored in the centralized bio-control database. The Biological Release Form and Guide that are provided to the workshop participants are attached in Appendix A. The Form and Guide can be downloaded from the NPBC web page (http://www.nezperce.org/~biocontrol/).

APPENDIX A

Bio-control Release Form and Release Form Guide

2003

Record_ID #

BIOLOGICAL CONTROL RELEASE FORMS

AGENT_RELEASE (core fields)

Released By: _____ *Release Date:* ___/___/___ *State* ___ *County:* _____
(yyyy mm dd)

Agent:_____ **#Released**_____ **Target Weed:**_____

Life Stages Released: Larva/nymph, Pupae, Adult, Egg, Multiple stages

Land Ownership: BIA, BLM, CGOV, OTH, PVLA, STAT, TNC, TRIB, USFS, USFW, USOT

Local Ownership (Optional): _____

UTM: UTM Datum Zone: __ UTM Year: ____ UTM Easting: _____ UTM Northing: _____

Lat: Deg_____ Min_____ Sec_____ **Long:** Deg_____ Min_____ Sec_____

LL_Datum:_____ **GPS File #:** _____

Legal: T_____ R_____ Sec_____ Q_____ QQ_____

SITE_CHARACTERISTICS

Site Name: _____ **Infest Size** (acres):_____ **Weed Cover %:**_____

Weed Height: _____ **Weed Density** (per meter sq):_____ **Dominant Plant:**_____

Weed Distribution: Isolated____ Scattered____ Sc-Patchy____ Patchy____ Continuous____ Linear____

Phenology: Seedling %____ Rosette %____ Bolt %____ Bud %____ Flowering %____ Dormant %____ Fruit %____

Vegetation Type: Annual Grassland, Bunch Grassland, Montane Grassland, Shrubland, Dry Conifer, Mixed Conifer, Dry Meadow, Moist Meadow

% Tree Cover____ **% Shrub Cover**____ **% Forb Cover** ____ **% Grass Cover**___ **% Litter Cover**____

% Bare Ground Cover____ **% Rock Cover**____

Soil Texture: (check all that apply, circle most prevalent) Sand___ Silt___ Clay___ Gravel___ Loam___

Weed Mgmt: ____Sheep Grz ____Goat Grz ____Herbicide ____Mechanical ____Other

ENVIRONMENT

Source of Agents:_____ **Date Collected:**____/____/____
(yyyy mm dd)

Temp. (F):_____ **Wind:** Calm, Light, Moderate, Strong, Gusty

Weather: Clear, Mtly Clear, Ptly Cloudy, Mtly Cloudy, Overcast, Rain, Snow **Release Time** (military):_____

Site Aspect: N, NE, E, SE, S, SW, W, NW **Elevation:**_____

Site Slope: Flat (0-10%)_____ Gentle (10-30%)_____ Moderate (30-60%)_____ Steep (>60%)_____

Topo Position: Valley Bottom, Terrace, Toe Slope, Low/Mid/Upper Slope, Crest

Disturbance: (rank) CUL___ FIR___ FLD___ GRZ___ LOG___ RDS____ MIN___ REC___ WLF____

Land Use: ____Grazing ____Recreation ____Timber ____Mining ____Wilderness ____Other

Directions to Site:_____

Comments:

BIOLOGICAL CONTROL RELEASE FORM GUIDE

RECORD_ID #: This field is for office use only, does not apply to field work data.

AGENT_RELEASE (core fields)

RELEASED_BY: Enter the full name (last, first, MI) of the primary individual making the release.

RELEASE _DATE: Enter the date the release is conducted in the following format – YYYY/MM/DD.

STATE: Enter the two-digit standard postal code abbreviation for the state where the biocontrol release is conducted. EXAMPLE – A release is conducted in Idaho, you would record; ID.

COUNTY: Enter the county where the release is made.

AGENT: The scientific name (genus and species) of the agent being released.

#_RELEASED: The total number of agents being released.

TARGET_WEED: The scientific name (genus and species) or the common name of the target weed the agents are being released to control.

LIFE_STAGES_RELEASED: Circle the life stage of the agent at the time of the release. Larva/Nymph or Pupae or Adult or Egg or Multiple stages.

LAND_OWNERSHIP: The ownership of the land where the agents were released.

CODE	DESCRIPTION	CODE	DESCRIPTION
STAT	State Lands	TNC	The Nature Conservancy
BLM	Bureau of Land Management	TRIB	Tribal Lands
CGOV	County Government	USFS	United States Forest Service
OTH	Other	USFW	United States Fish and Wildlife Service
PVLA	Private Landowner	USOT	US Government (other federal lands)

LOCAL_OWNERSHIP: This is not a core field. This field identifies state and local land managers/owners. Write in local owner/manager.

UTM or LAT/LONG or LEGAL: On the ground point of release. Locations can be described using a variety of methods; any one of the following methods may be used; UTMs, Lat-Longs, or legal.

UTM – UTM Datum Zone and year are required with the easting and northing localities.

LAT/LONG – Datum, degrees and minutes are required, seconds are optional.

LEGAL - Township, Range and Section are required, quarter section and quarter/quarter section are optional.

SITE_CHARACTERISTICS (optional fields)

SITE_NAME: Geographic reference to the site assigned by the releaser.

INFEST_SIZE (acres): Area of land containing weed species targeted for a biocontrol release. An infested area of land is defined by drawing a line around the actual perimeter of the infestation as defined by the canopy cover of the plants, excluding areas not infested. Generally, the smallest area of infestation mapped will be 1/10th (.10) of an acre.

WEED_COVER %: Weed cover will be estimated as a percent of the ground covered by foliage of the target weed species. Use the cover class system developed by NAWMA as listed under % COVER_CLASSES.

WEED_HEIGHT: Average height of target weed in inches.

WEED_DENSITY (per meter sq): The average number of target weeds per square meter at a release site.

WEED_DISTRIBUTION: How a target weed is distributed over land.
Check Isolated or Scattered or Sc-Patchy or Patchy or Patchy or Continuous or Linear.

PHENOLOGY: Percentages of the stage of the target weeds phenology.
% Seedling, % Rosette, % Bolt, % Bud, % Flowering, % Dormant, % Fruit

VEGETATION_TYPE: Categorizes the plant community growing (or that should be growing) in a particular area.
Circle Annual Grassland or Bunch Grassland or Montane Grassland or Shrubland or Dry Conifer or Mixed Conifer or Dry Meadow or Moist Meadow.

% COVER_CLASSES: Percentage of trees, shrubs, forbs, grasses, litter, bare ground and rock at the biocontrol release site. Use the following cover class system developed by NAWMA.

CODE	COVER	MID POINT	CODE	COVER	MID POINT
T	0-1.0%	0.5%	**6**	55.1-65.0%	60.0%
0	1.1-5.0%	3.0%	**7**	65.1-75.0%	70.0%
1	5.1-15.0%	10.0%	**8**	75.0-85.0%	80.0%
2	15.1-25.0%	20.0%	**9**	85.1-95.0%	90.0%
3	25.1-35.0%	30.0%	**A**	91.1-99.0%	97.0%
4	35.1-45.0%	40.0%	**X**	99.1-100%	95.0%
5	45.1-55.0%	50.0%			

SOIL_TEXTURE: What is the soil texture at the release site. Check all that apply and circle the most prevalent.

WEED MGMT: Current additional weed management techniques employed at the release site. Check all that apply; Sheep Grazing, Goat Grazing, Herbicide, Mechanical, other.

ENVIRONMENT (optional fields)

SOURCE_OF_AGENTS: Where the biocontrol agents that are being released came from, (sender, state, city, county).

DATE_COLLECTED: The date the biocontrol agents being released were collected in the following format – YYYY/MM/DD.

TEMP. (F): Temperature (degrees Fahrenheit) at the release site when the agents are released.

WIND: How the wind is at the time and place the agents are released. Circle one of the following; calm, light, moderate, strong or gusty.

WEATHER: How the weather is at the time and place the agents are released. Circle one of the following; clear, mostly clear, partly cloudy, mostly cloudy, overcast, rain or snow.

RELEASE_TIME (military): Time of day the agents are released.

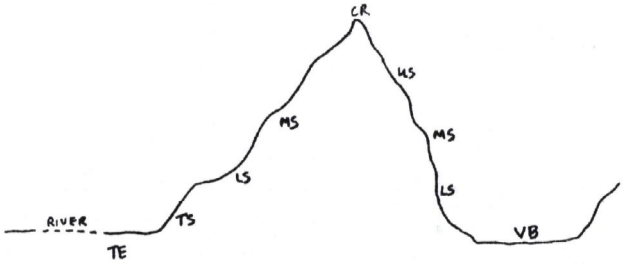
SITE_ASPECT: The relative direction, or compass orientation of the slope where the agents are released.

ELEVATION: The elevation, in feet, at the release site.

SLOPE: The inclination of the land at the release site.

TOPO_POSITION: Physical configuration and land features at the release site.

CODE	DESCRIPTION
VB	Valley Bottom
TE	Terrace
TS	Toe Slope
LS	Lower Slope
MS	Middle Slope
US	Upper Slope
CR	Crest



DISTURBANCE: Activities that have altered the vegetation community in the release area. Rank disturbance factors that apply with # 1 as the most recent: Cultivation, Fire, Flood, Grazing, Lugging, Roads, Mining, Recreation, Wildlife

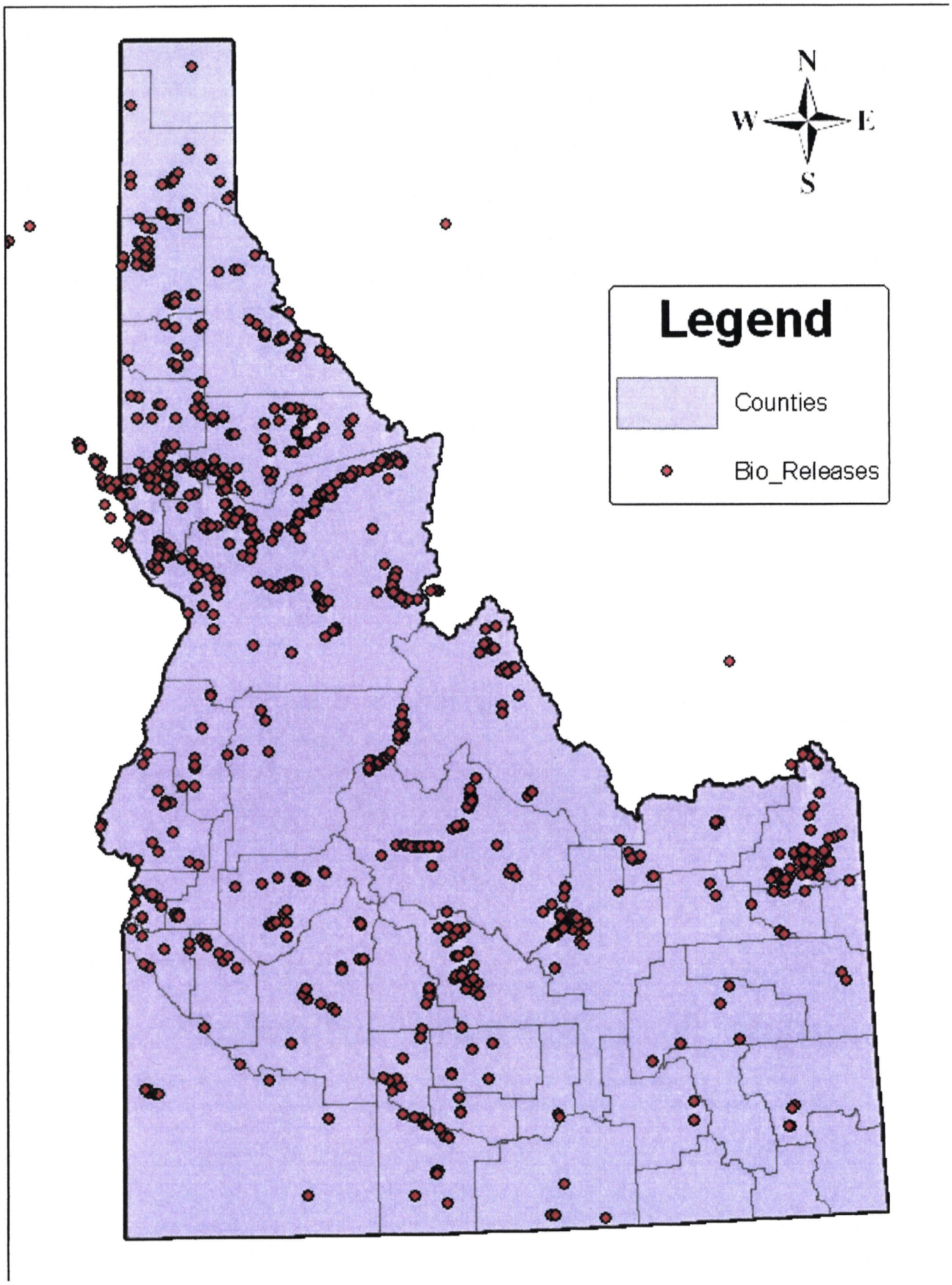
LAND USE: Primary use of land adjacent to the release site. Check one of the following; Grazing, Recreation, Timber, Mining, Wilderness or Other.

DIRECTIONS_TO_SITE: How to find a release site. Enter the directions to the release site, using permanent markers, cardinal directions, and/or mileage for geographic references. Back of form can be used for hand drawn map.

COMMENTS: General comments about the biocontrol agent release, vegetation, non-target organisms and/or the weed infestation site. The back of the release form can be used for additional comments and/or a hand drawn map to the site.

Description of the Project Area

Bio-control Database Project:
A Partnership between ISDA and the NPBC

The project area includes the entire state of Idaho. Coordination will continue to occur with public and private land managers to facilitate the collaboration efforts to manage all biological control agent release information using the established centralized bio-control release database, managed by the Nez Perce Bio-control Center. Attached is a map showing biological releases.

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