

Yampa River Leafy Spurge Project

BIOLOGICAL CONTROL RELEASES DATA FIELDS

In 2018, the YRLSP began researching out and compiling all available records for “legacy” (prior to 2019) leafy spurge biological control releases in Moffat and Routt counties. Since 2018, the YRLSP has continued to add any reported contemporary biological control releases in the Yampa River Basin, including those made by the YRLSP or in cooperation with local agencies. For further information on biological control efforts in the Yampa River Basin, see <https://www.yampariverleafyspurgeproject.com/biological-control>).

The following document describes the data fields as they appear in the publicly downloadable version of the YRLSP’s Biological Control Releases dataset.

FID

“Field Identifier.” The unique ArcMap identifier for the dataset record.

Shape

The ArcMap geometry.

ReleaseID

As the YRLSP compiled the records of legacy (prior to 2018) leafy spurge biological control insect releases, each identified legacy release was given a unique ReleaseID number, starting with number 1. However, it should be noted that, because of the difficulty of ultimately identifying the uniqueness (and date) these earlier release records, the ReleaseID number series as it now exists is not always continuous (there may be missing numbers), and it should not be considered chronological. Starting in 2019, each additional leafy spurge biological control release has also been assigned its own unique ReleaseID in a continuation of the original numbering series. Contemporary ReleaseIDs are assigned serially as these releases are made by, or reported to, the YRLSP.

Year_

This field displays the year in which the leafy spurge biological control release was made.

County

The county in which the leafy spurge biological control release was made.

CDA_Sent

The date that a shipment of leafy spurge biological control agents was sent to a local county agent. This information was not recorded in every available CDA record, but when it is available it may also be the closest we can get to determining the actual date of release.

Rel_Date

“Release Date.” This field is only populated when a specific day of release can be determined from the available records.

Rel_Approx

“Release Approximate.” When a more precise date of release cannot be determined, a possible window of time during which the release might have occurred may be included in this data field. Often this has been estimated from a **CDA_Sent** date, but it may also have been tentatively extrapolated from other information, such as comments associated with the original release record(s).

Quantity

The quantity of insects released on the release date. These numbers are generally reliable and were specified in the original records. A zero value represents a NULL value, meaning no information was available for this field.

Species

Some of the legacy release records report the biological control agent to species. Other legacy releases may have simply reported a mix of *Aphthona* species, entered into this field as “*Aphthona* spp.” In more contemporary releases records, including YRLSP releases, there has been no attempt to identify the *Aphthona* beyond grouping them into “black” or “brown” species—again entered into this field as “*Aphthona* spp.” For more information about specific leafy spurge biological control species, see the “YRLSP Biological Control Species ID Guide” available in the YRLSP Documents list at <https://www.yampariverleafyspurgeproject.com/resources>.

Data_Sourc

“Data Source.” This field points to the group of records containing the original release information. Much of the legacy release information comes from Excel spreadsheets supplied by the Colorado Department of Agriculture. In some cases, if the county agencies reported back to the CDA after making releases with CDA-supplied insects, the CDA was also able to supply photocopies of the paper forms that the county agencies filled out at the time of the release. Additional digital records were also supplied directly to the YRLSP for some of the more recent releases by Moffat County Weed & Pest Management or the Routt County Weed Program. All of these records sources were correlated and cross-referenced to avoid duplication when assigned numbers in the ReleaseID series.

LxAccuracy

“Location Accuracy.” This is an assessment of the relative accuracy of the spatial information available for the release site.

For most of the years when leafy spurge biological control releases were made in the Yampa River Basin, GPS-enabled devices were not available for recording the release locations in the field. Occasionally, a sketch depicting the release location in reference to recognizable landmarks was included on a paper form. When latitude and longitude were reported, it had typically been measured and calculated from a paper USGS map, likely at some time that may have been days, or longer, after the day of release. When, more rarely, UTM values were reported, they were also measured and calculated in the same way (in the outdated NAD27). Besides the general level of inaccuracy due to the scale of the USGS maps, sometimes these calculations were clearly made in error. Finally, for

some of the legacy releases, all we have is the street address where the CDA sent the package of biological control insects.

Since the advent of ubiquitous GPS-capable field devices, release location data has become highly accurate.

Comments

This comments field records relevant information about the correlation and cross-referencing of the original records, known spatial anomalies, and any further information gathered from individuals who may have been involved with the specific release. Post-2018, the comment field will include the specific source of the biological control insects.

SiteName

“YRLSP Monitoring Site Name.” YRLSP monitoring sites are discrete areas of relatively homogenous habitat, in which one or more documented biological control insect releases have been made. Note that specific Biological Control Releases are identified by their unique ReleaseID. Multiple biological control releases may have occurred at the same monitoring site. Note also that many of the monitoring sites listed in this field have not actually been visited/monitored by the YRLSP.

YRLSP monitoring site names combine a nonspecific name for the general area (typically the current property landowner or managing agency unit name) with the unique Release ID number for the first biological control release recorded at that site. In a few cases involving legacy (pre-2019) biological control release locations, the YRLSP Monitoring Site Name can include two legacy Release ID numbers.

Quant_Spp

“Quantity and Species.” This field combines the **Quantity** and **Species** fields as one value.

latitude

This value has been generated from the current spatial record as it is stored in the YRLSP geodatabase, not from any latitude given in the original record source.

longitude

This value has been generated from the current spatial record as it is stored in the YRLSP geodatabase, not from any longitude given in the original record source.

UTM87north

The northing UTM for the plot point in NAD87, Zone 13N. This field was generated from the current spatial record as it is stored in the YRLSP geodatabase, not from any UTM given in the original record source.

UTM87east

The easting UTM for the plot point in NAD87, Zone 13N. This field was generated from the current spatial record as it is stored in the YRLSP geodatabase, not from any UTM given in the original record source.