

Yampa River Leafy Spurge Project

BIOLOGICAL CONTROL RELEASES DATA FIELDS, UPDATED DEC. 2024

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.

OBJECTID

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 legacy release was given a unique ReleaseID number (serially, starting with 1). Leafy spurge biological control releases made by the YRLSP and its partners since 2018 continue to be assigned ReleaseIDs in the same series.

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.

GPS-enabled devices were not available for recording release locations for most of the years when “legacy” (pre-2019) leafy spurge biological control releases were made in the Yampa River Basin. Occasionally, a sketch depicting the release location in reference to recognizable landmarks was included on a paper form. Typically when latitude and longitude were reported on these forms, it had been measured and calculated from a paper USGS map, likely at the end of the release day, but potentially days or even weeks after the release. When, more rarely, UTM values were reported on these forms, they were almost certainly measured and calculated from USGS maps in a similar fashion (using the USGS UTM grid, shown in the outdated NAD27 datum).

In addition to the general level of inaccuracy to be expected from such measurements, sometimes it is clear that calculation errors resulted in spatial data that field checking determined to be not even close to the possible release location. And finally, for some of the legacy releases, all we have is the street address where the CDA sent the package of biological control insects.

Once the use of GPS-capable field devices become the norm, release location data has almost always been taken at the time of release, and is highly accurate. However, if the **LxAccuracy** field records the accuracy as “Vicinity,” this is an indication that a large number (multiple thousands) of beetles were released at multiple locations in the surrounding area.

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.

Lat

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

Long_

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

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 on different dates. 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.