



YAMPA RIVER LEAFY SPURGE PROJECT

“... working together to establish an effective program of integrated management for leafy spurge...”

YAMPA RIVER LEAFY SPURGE PROJECT 2021 ACCOMPLISHMENTS

1. Final deliverables and invoice on the CWCB WSRF grant were submitted to the CWCB and Yampa-White-Green Roundtable on December 22, 2021. After these documents are reviewed and approved, a final reimbursement to Friends of the Yampa will be made, which will close out the grant project. All deliverables on the grant will be posted to the YRLSP website by January 31, 2022. (Tamara)
2. Chloe Mattilio (UW PhD candidate) developed a remote-sensing application that included correlation with the field mapping data collected by YRLSP, followed by ground truthing in the Axial Basin and Maybell areas of the initial model and further corrections. The final model classification identified leafy spurge on the ground correctly with an overall accuracy rate of 91.3%—a remote sensing classification performance that is significantly better than random. (Tamara, Chloe)
3. Chloe Mattilio also developed two invasion risk predictive models for the basin that will aid leafy spurge control efforts now and into the future. The best-fitting model classifies 359,680 acres in Routt and Moffat counties as having “high suitability” for leafy spurge invasion, and another 2 million acres with “moderate suitability.” The model helps us understand the need to continue efforts to thwart the progress of this pernicious weed. (Tamara, Chloe)
4. Hannah Kuhns (Univ WY Master’s student) further supported our understanding of water as a vector for spreading leafy spurge downstream, by showing convincingly that root fragments eroding out of banks and sandbars during runoff season are capable of floating downstream and re-establishing new plants that contribute to a burgeoning infestation. Her management treatment studies tell us that targeted sheep grazing is not practical in most riparian settings, and probably not something to pursue in other than very limited circumstances. Lastly, Hannah’s herbicide studies indicated that Quinclorac and Duracor may cause a reduction in seed production, but more work on timing of application, rate of application, and duration of effect is warranted. (Tamara, Hannah)

5. Completed mapping of leafy spurge infestations on the Yampa River from Hayden to Cross Mt for a total of 108 miles with 5 miles mapped in Axial Basin above Juniper Campsite. (Pete)
6. YRLSP volunteers and partners conducted monitoring on nine sites where insects were released in 2019 and 2020. Biocontrol insects were still present on all nine sites. Detectable changes in leafy spurge cover were only recorded on two of the nine sites, but visible signs of insect activity were present on all nine sites. (Tamara, Group)
7. Purchased 9,950 leafy spurge beetles (3,250 by YRLSP, 6,200 by CPW, and 500 by RC Weed Program) and released beetles to new sites including YRSWA, Loudy Simpson Island, CPW South Beach, McIntyre, K-Diamond Ranch, and 78A north of Hayden (Group)
8. Continued outreach to landowners in Routt and Moffat Counties. Moffat County Weed and Pest and Routt County Weed Program continue to have conversations with landowners . CO First Conservation Dist. surveyed landowners at their Annual Meeting . Baili Foster (NRCS) surveyed attendees at the Routt County Conservation Dist. meeting.
9. Members of the YRLSP and NRCS met with the owner of J Quarter Circle Ranch to discuss an integrated management of leafy spurge. Chose a biocontrol release site for 2022.
10. Follow-up with 2019-2020 stakeholder and mapping partners. Obtained 7 new permissions (Colleen Behrman, Bruce Barnes, Janice Edwards, Nathan Mock, Darryl Steele, Dave Stoffle, and Elam). (John, Jesse)
11. Continued the updating of the YRLSP website (Pete)
12. Organized the 2021 Show Me Float with 16 participants in Little Yampa Canyon on June 11th and 12th (John, Ben)
13. Moffat County Weed and Pest monitored the treatments of leafy spurge infestations on various properties with inconclusive results on chemical treatment using Milestone and Quinclorac. (Jesse)
14. Routt County Weed Program continued to monitor the management of the leafy spurge infestation on Iron Springs Ranch near Stagecoach Reservoir and 2021 backpack herbicide treatment by Don Stinton. (Tiffany, Todd)
15. Dinosaur National Monument had one Yampa River leafy spurge hand pulling removal raft trip. (Emily)
16. Reports to supporting organizations: FOTY Board (Tamara), Moffat County Board of County Commissioners (John) and Routt County Board of County Commissioners (Ben, Tiffany, Jonathon)

17. Created Six-Year YRLSP Report with update of Five-Year YRLSP Report with 2021 Accomplishments (Ben)

18. Organized a Biocontrol Field Trip to a release site on the YRSWA to review the results of biocontrol with these participants: (Tamara, Ben, Jesse, Jonathan Murray, Kristen Gornell).