BONNER COUNTY NOXIOUS WEEDS

• 521 S. Division Ave, Suite 216 • Sandpoint, ID 83864
• Phone: (208) 255-5681ext.6 • Email: chase.youngdahl@bonnercountyid.gov
• Website: https://www.bonnercountyid.gov/noxious-weeds

Weed of the Month

By Chase Youngdahl—*Director***,** *Bonner County Noxious Weeds*

Fair warning—before you proceed, know that this article is going to be a bit drier and more boring compared to the norm, as I will be presenting data gathered from some herbicide trials that I've been evaluating for a few years. So—as long as I don't fall asleep while writing—here we go! I know that there are several of you that have been waiting for this content.

The preface:

Marestail (Conya canadensis) is a summer annual broadleaf weed that has cropped up in the last decade or so, and has really garnered people's attention. Being a summer annual, it goes unnoticed for the better part of the growing season until it bolts, making it visually prevalent. August is when that occurs, which is the month that it flowers and begins going to seed. As is the case for most annuals, the development stage timeline adds to the control challenges. Marestail is a plant that's native to the United States. I have landowners give me blank stares, or awkward silences on the phone when I explain to them that it belongs here. I do agree that it has become more prolific than it probably should, for whatever reason—potentially climate or soil balance related, but I do not foresee it rising to catastrophic levels in the way that many non-native noxious weeds have. Eventually, I believe that there's going to be a factor in our ecosystem that puts it in check, whether it's a fungus or an insect or a soil microbe or a shift in cyclical weather patterns. And being a native plant, there has been limited research conducted on sustainable herbicide options. Research is expensive, and weeds that do not belong in our ecosystem take priority. It doesn't help that chemical companies have been hammered with frivolous lawsuits in recent years, particularly on glyphosate. Fighting or settling those lawsuits drain resources that could otherwise go towards new chemistry innovations.

What we do know is that Marestail is resistant to most Group 2 herbicides—which includes the sulfonylureas, such as chlorsulfuron (TelarXP®) and metsulfuron (EscortXP®), among others. It pretty much left us with Group 4 herbicides (growth regulators), and some lesser used modes of action, as potential options for selective control. Empirical evidence that I've gathered over the years indicates that it's resistant to aminopyralid (Milestone®), and will emerge through an aminopyralid treated area within the same year. After running through the gamut of Group 4 options and making little headway with anecdotal success, I had a landowner donate a fallow portion of land to me for the purpose of experimenting with different herbicides/herbicide combinations applied at different times of the year with the opportunity to carry out observations over a period of time. Rejuvra® (indaziflam), a Group 29 herbicide, was a tool of emphasis in the trials. The objective was to find a successful, selective pre-emergent treatment option.

BONNER COUNTY NOXIOUS WEEDS

• 521 S. Division Ave, Suite 216 • Sandpoint, ID 83864
• Phone: (208) 255-5681ext.6 • Email: chase.youngdahl@bonnercountyid.gov
• Website: https://www.bonnercountyid.gov/noxious-weeds

The data:

In summer of 2022, I set up two ½-acre plots and color coded them for documentation purposes. Pink plot had 75% Marestail cover and Green plot had 50% Marestail cover. On August 15, 2022, the Pink plot was treated with Rejuvra® (indaziflam) at 7 oz/acre + Plateau® (imazapic) at 7 oz/acre, and the Green plot was treated with Rejuvra® at 7 oz/acre + Outrider® (sulfosulfuron) at 1 oz/acre. At 11-MAT (Months After Treatment) on July 11, 2023, the Pink plot showed 25%-30% Marestail cover, about a 50% reduction, and perennial grasses in good health. The same observation interval for the Green plot showed 15%-20% Marestail cover, about a 30% reduction, but injured and unhealthy looking perennial grasses. General noxious weeds & perennial nuisance weeds experienced no meaningful reduction in density from either treatment at the 11-MAT survey.

A 3rd ½-acre plot, coded as Red, was assessed in summer 2022 and treated on May 4, 2023 with Rejuvra® at 7 oz/acre. Pre-treatment inventory of Marestail cover was 35%. At 18-WAT (Weeks After Treatment) on September 7, 2023, observations showed 1%-2% Marestail cover with distinct spray lines against the check areas, and healthy perennial grasses. At 14-MAT on July 2, 2024, this plot had an emergence of Marestail at about 20%-25% cover—pretty close to the 35% initial cover, however, there were still some discernable spray lines against the check area.

The final round of treatments occurred in the fall. The Pink plot was treated on October 18, 2023 with Rejuvra® at 5 oz/acre + Milestone® at 6 oz/acre + TelarXP® at 1 oz/acre. The Marestail cover at time of treatment was observed to be 30%-35%. The primary reason for adding Milestone & TelarXP was to capture the noxious & nuisance weeds that also had a presence in the plot. At 8-MAT on July 2, 2024, there was about 5% Marestail cover observed, which was mostly noted in the swath skips where not quite enough of the treatment overlap occurred. At 2-YAT (Years After Treatment) on September 26, 2025, the Pink plot showed about 10%-15% Marestail cover with robust perennial grasses. The Green plot was treated on October 28, 2024 with Rejuvra® at 5 oz/acre + HighNoon® (aminopyralid + florpyrauxifen-benzyl) at 20 oz/acre. The plot assessment at that time indicated 40%-45% Marestail cover, with much of the areas that were left bare as a result of the Outrider® component in the 2022 treatment having filled in with Marestail. At 1-YAT on September 26, 2025, there was zero Marestail observed in the Green plot, save for one strip where the treatment did not fully overlap.

Since there is a lot of raw data to unpack here, my plan is to write a ‘part 2’ of sorts for the January edition, where I will aim to summarize my conclusions in a digestible manner. There’s also the overarching issue of public expectations regarding Marestail (among other non-regulated weeds) to be addressed.