Boise Parks and Rec Pesticide Use

Fiscal Year 2024

Most Highly Applied Active Ingredients by Weight:

1. Glyphosate
2. Dichlobenil
3. 2,4-D
4. Triclopyr
5. Dicamba
6. Ethephon*
7. Pendimethalin
8. Trifluralin
9. Fluroxypyr
10. Mesotrione

*Note: Ethephon, a growth regulator, is applied only at golf courses managed by BPR: Warm Springs Golf Course and Quail Hollow Golf Course.

In 2024, BPR applied an equivalent of 192 gallons of liquid formulated pesticides and 9008 lbs. dry formulated pesticides. The liquid formulation total includes approximately 73 gallons of glyphosate based herbicides (GBH). As can be seen in Figure 1, product applications of liquid formulated pesticides remain low as they have since the implementation of the Pesticide Reduction Program in 2022 while the use of dry formulated, mostly pre-emergent pesticides has increased. GBH applications rose slightly in 2024 in response to the emergence of resistant plant populations primarily on BPR managed rights of way. (See Figure 2) .

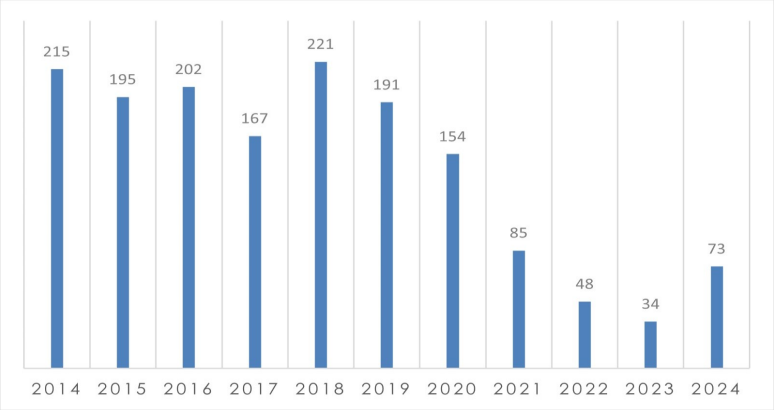
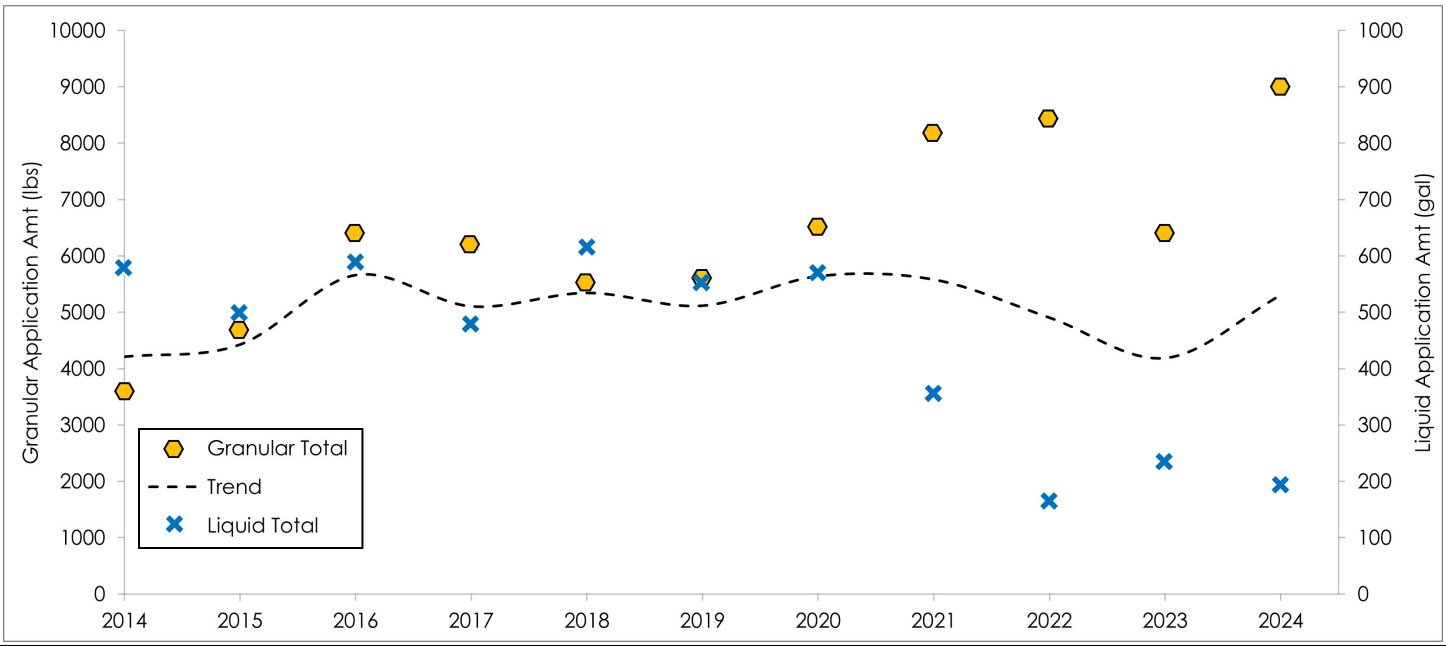


Figure 2 ↑(above)↑: GBH application amounts (gal)

Figure 1 ↓(below)↓: Total application amounts



The most highly applied products in use by BPR can be broadly separated into three distinct groups. Products used for broad spectrum control of unwanted vegetation, those used for selective control of broadleaf species in turfgrass and products used to control insects, primarily billbug. Figure 3 shows the amount of broad spectrum herbicide products applied in 2024 compared with previous years.

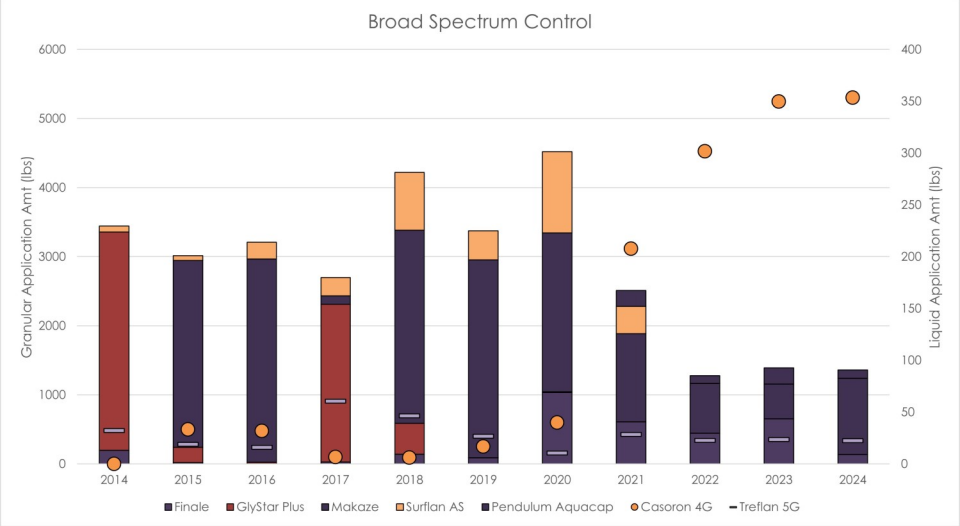


Figure 3: Broad Spectrum herbicide applications. Treflan 5G and Casoron 4G are dry formulated products and are measured in lbs on the left-hand axis. All other products are measured in gal. on the right-hand axis

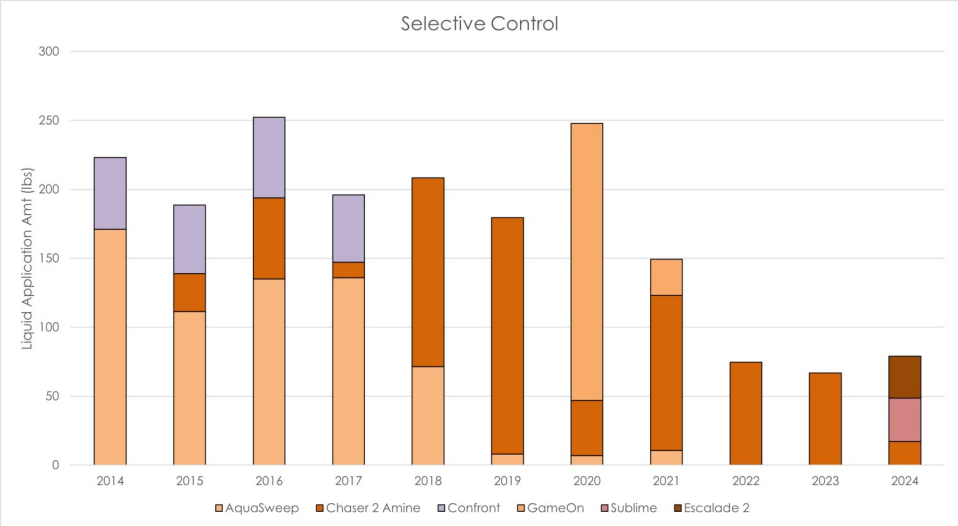


Figure 4: Broadleaf selective herbicide applications. All products are liquid formulated.

Broadleaf selective herbicide use is shown in Figure 4. Broadleaf control has been significantly curtailed by the Pesticide Reduction Program in recent years, however due to issues with Canada thistle at several park sites two products using the active ingredient Dicamba (Escalade 2 and Sublime) were trialed in 2024. Sublime was deemed to be more effective in treating thistle populations and will be used in future years.

Pesticide use for insect control has remained steady in 2024. These products are overwhelmingly billbug treatments across BPR managed sites. Billbug populations are controlled to avoid damage to turfgrass which is their primary food source. The decision to implement chemical control of billbug is made on a case by case basis according to careful site monitoring when dense populations are found.

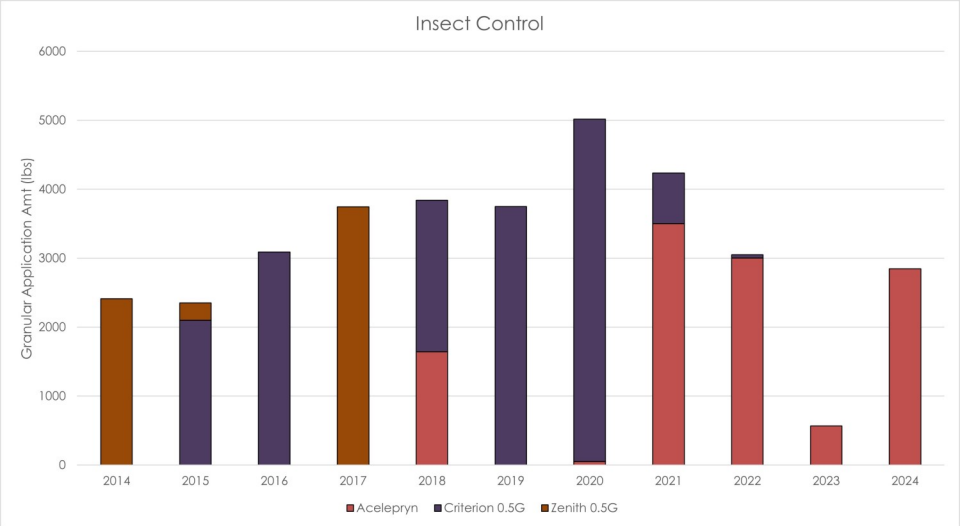


Figure 5: Insecticide application amounts. All products are dry formulated.