

Vermont Agency of Agriculture – Ag Chemical update

VT CAC 1/11/2021

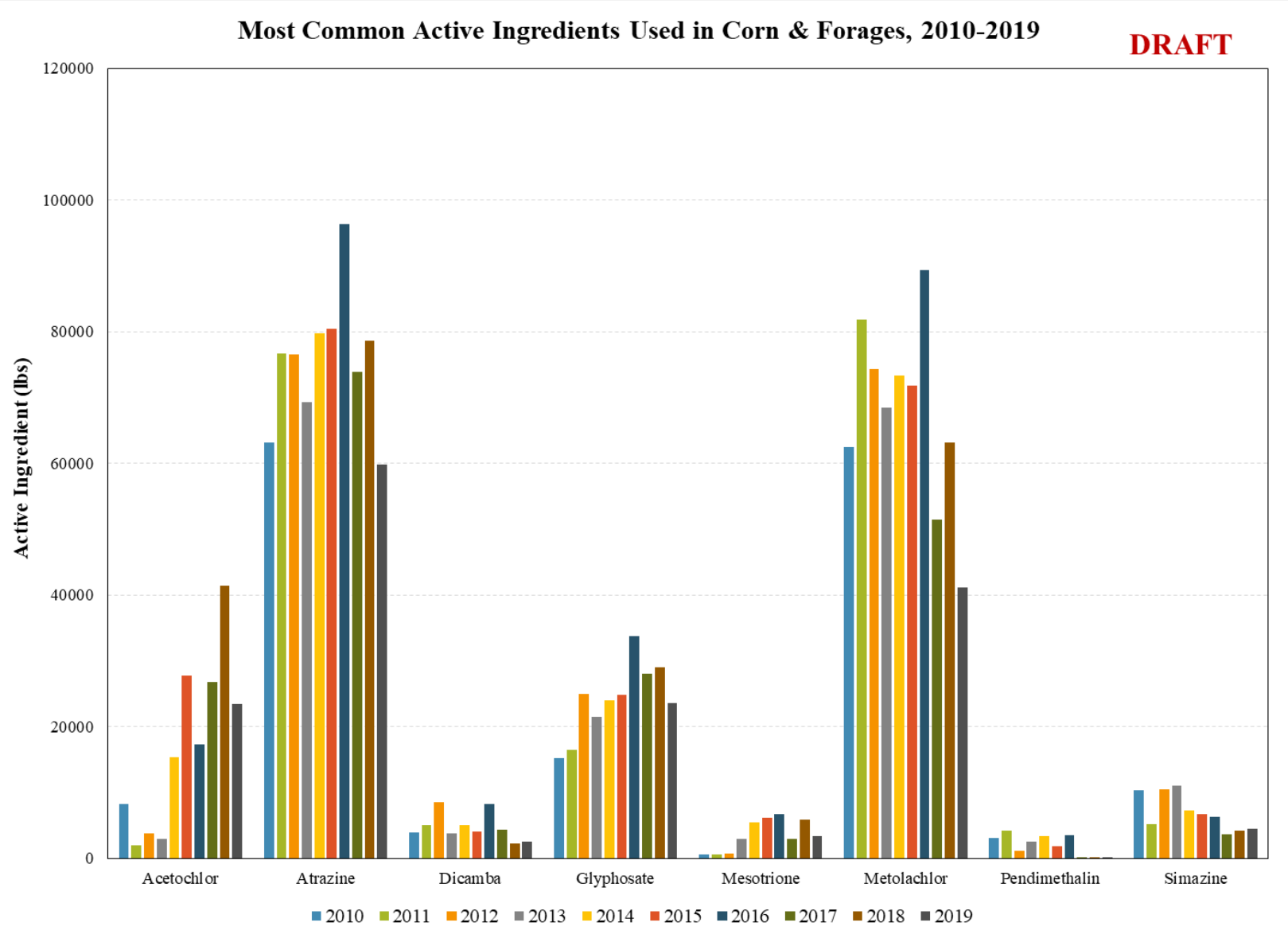
Pesticide Usage

- Previous database contained errors in information stored, as well as in calculations. Created new database (2017-2018).
- In 2018, reviewed every product label, recalculated math. New labels contain clearer information and more common synonyms = less errors.
- Data reported January 2020.
- Data from 2019 was collected in 2020 and will be reported shortly to the public. We will share some of the draft of that tonight.
- Also, as companies are inspected/or come into compliance in later years usage will change slightly. We expect a bit of variance with the previous year: 2018 data will be re-published as final, 2019 as initial. (next year 2019 final....)
- Broad data set, self-reported—we do use to generate inspection requests for verification & records checks.

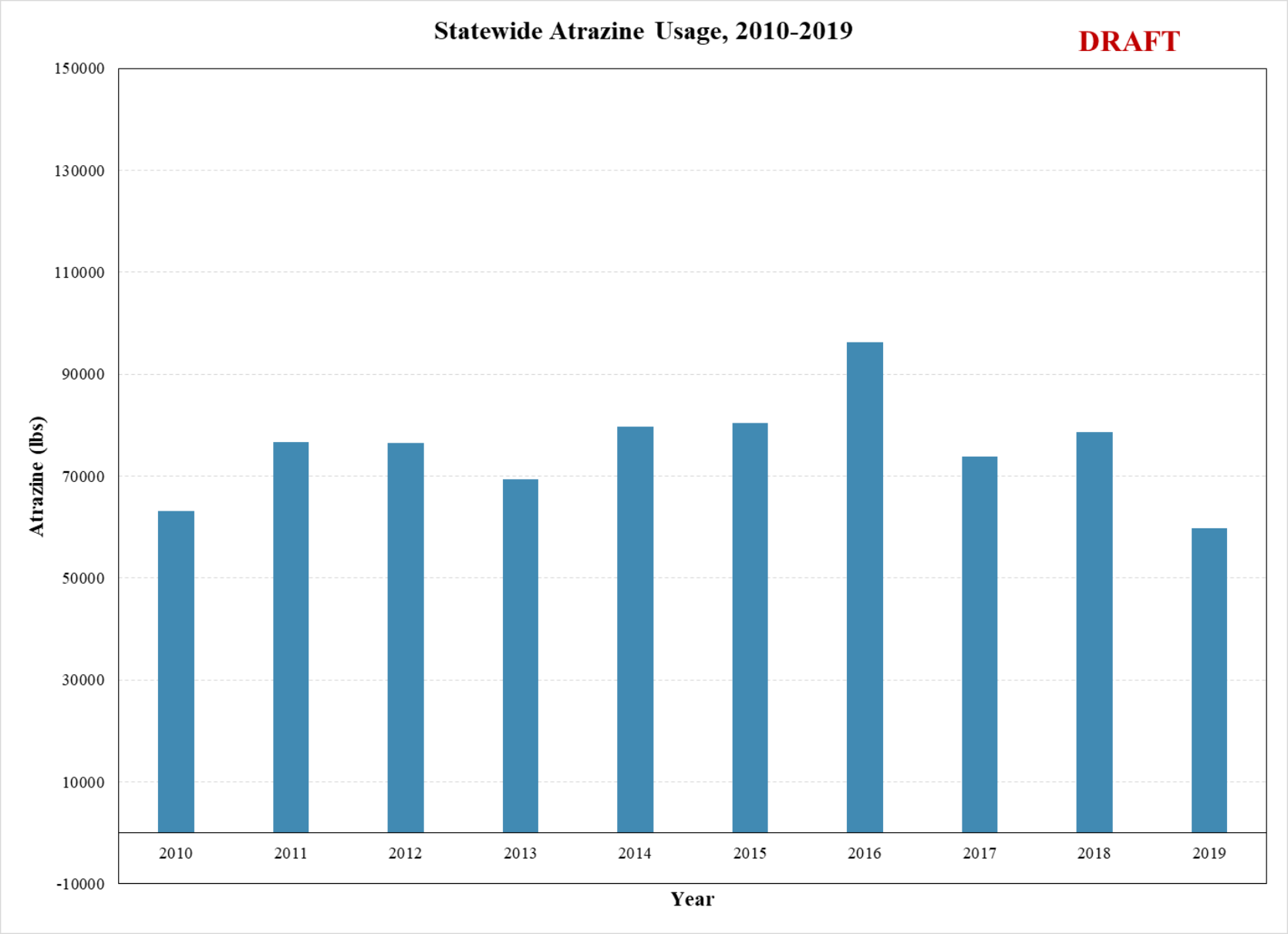
Usage Overall

- About the same number of total pounds reported (1,000,000#), a significant portion of that is disinfectants/biocides (cooling tower companies)
- Second highest use in the state is corn herbicides.
- In 2019, we see a drop across traditional corn herbicide active ingredients. As a one-year number, we do not know if it is a trend or outlier. If trend: drop in farm acreage? better data collection? diversification of crops (hemp)? weather? milk and feed prices?

Corn/forage herbicides

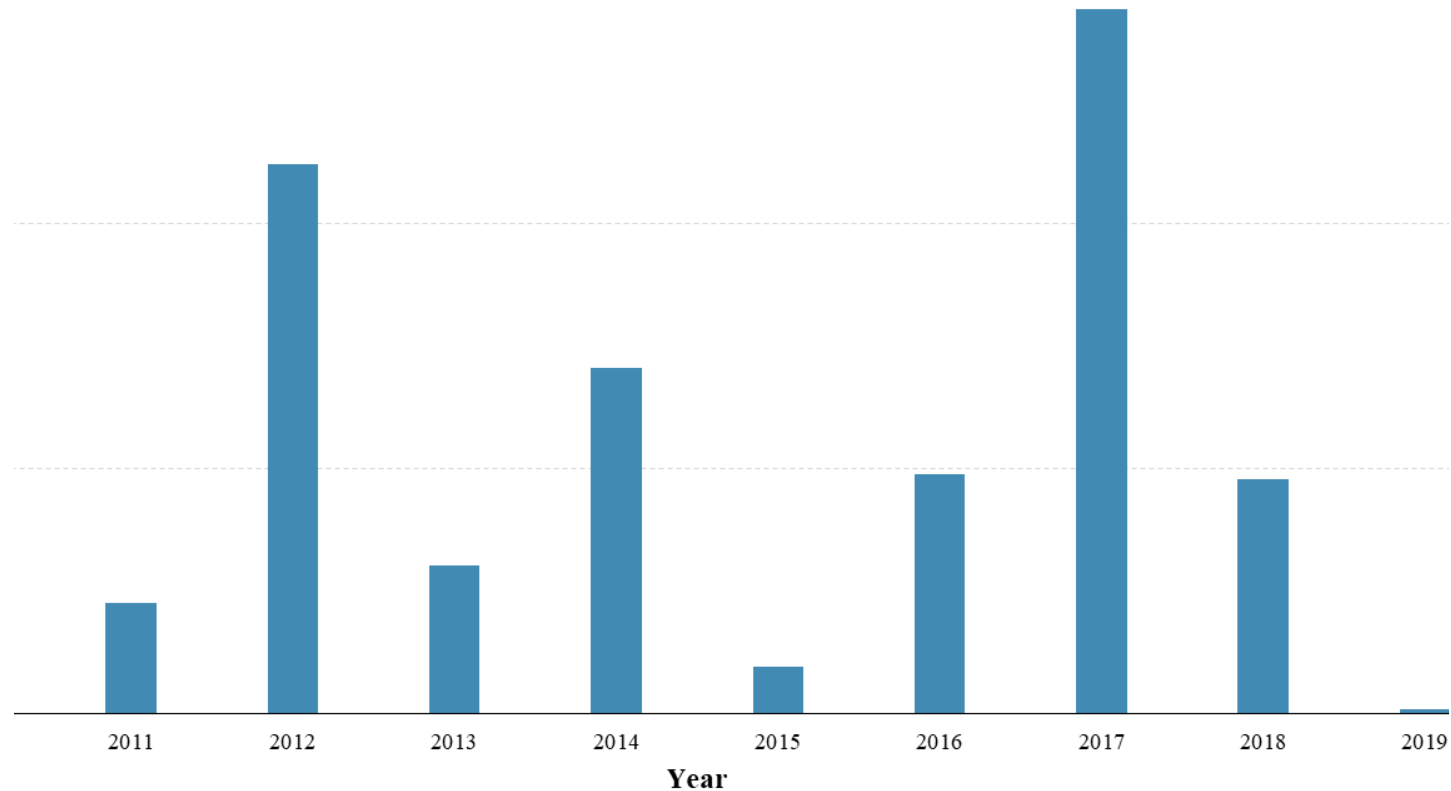


Atrazine

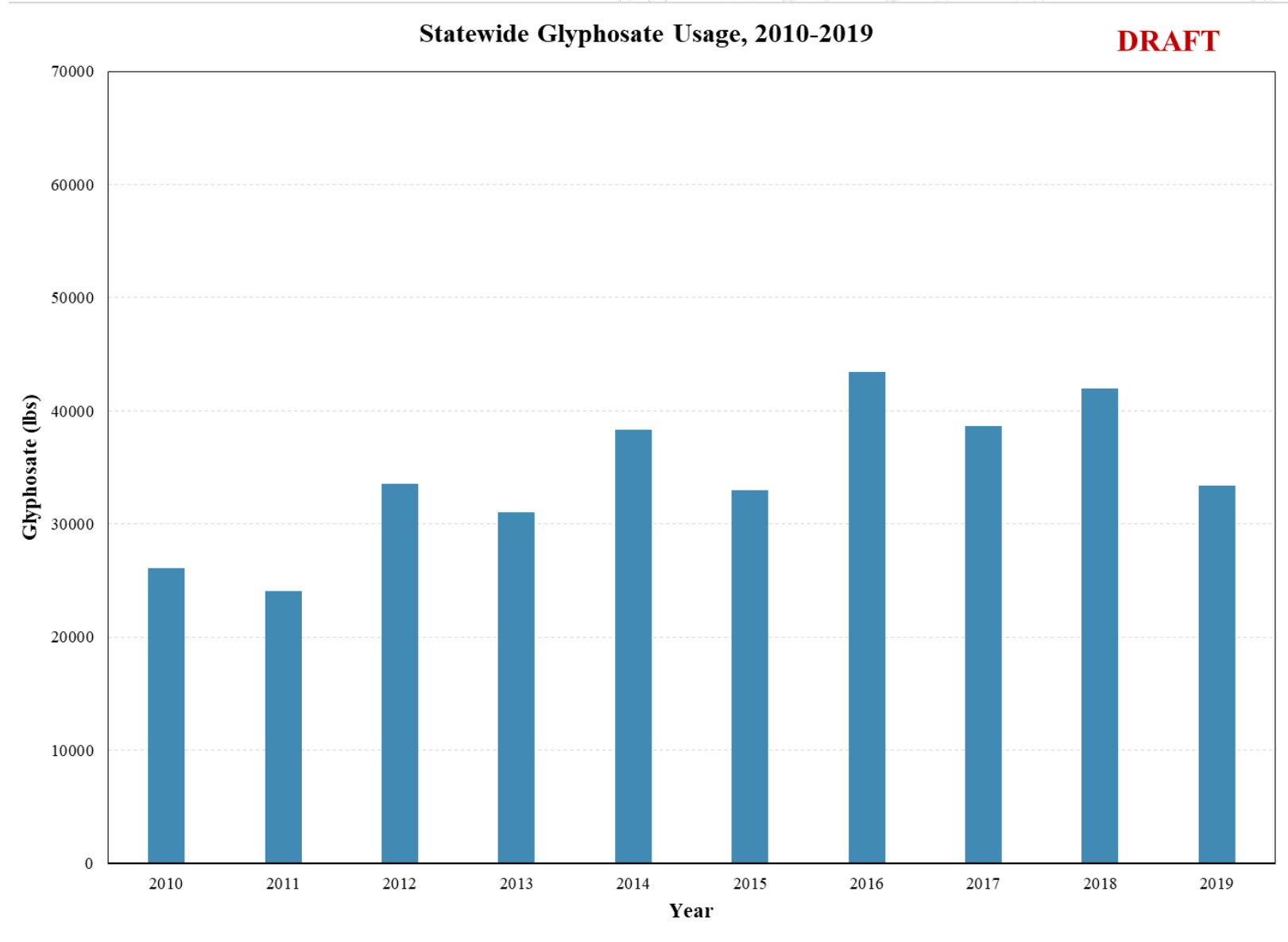


Chlorpyrifos

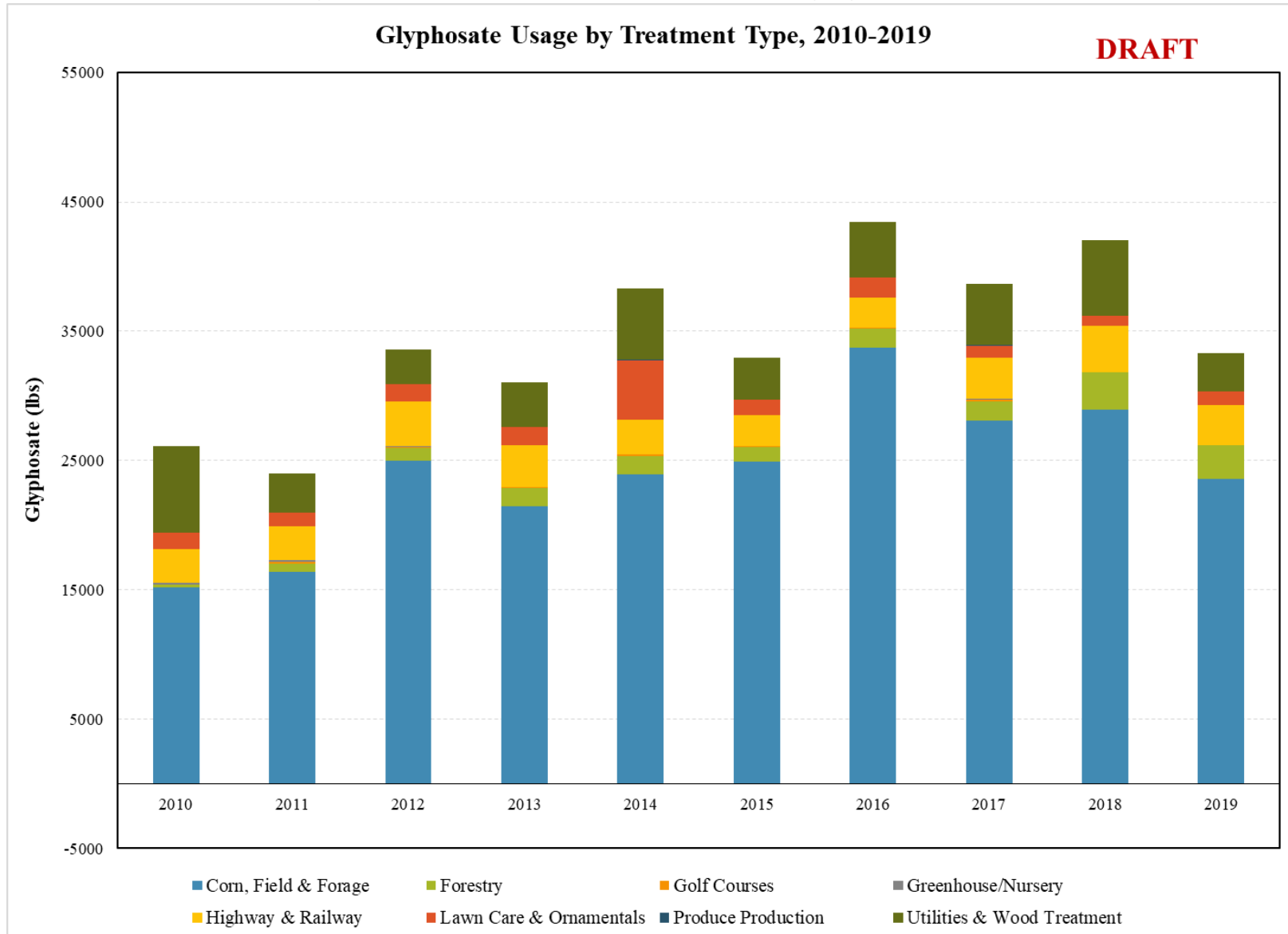
- Chlorpyrifos use essentially cancelled.
- One pound was reported as used in 2019.
- Removed from all permits.
- All restricted use dealers inspected for storage of old products. Have been working with dealers to get removed.



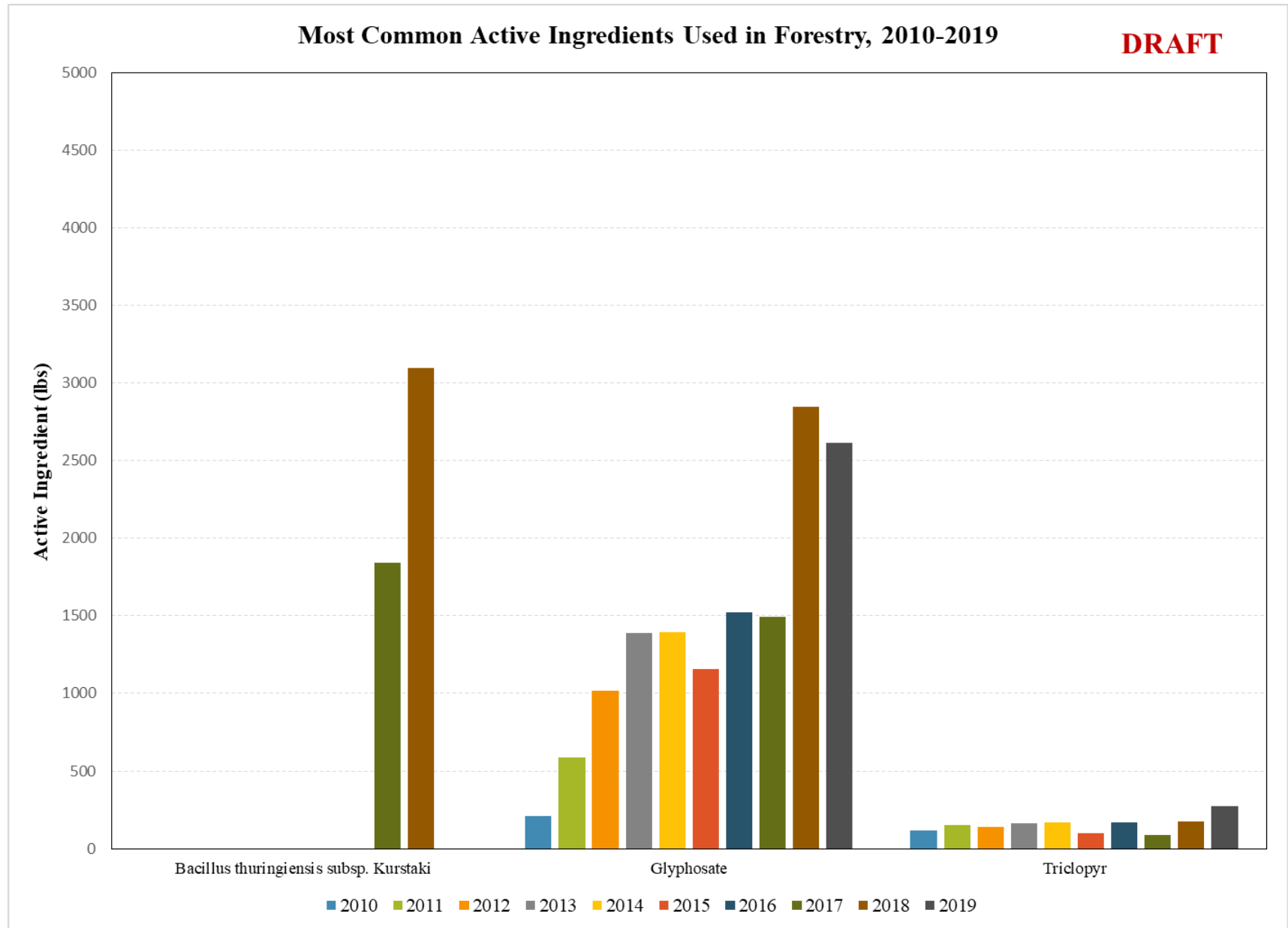
Glyphosate



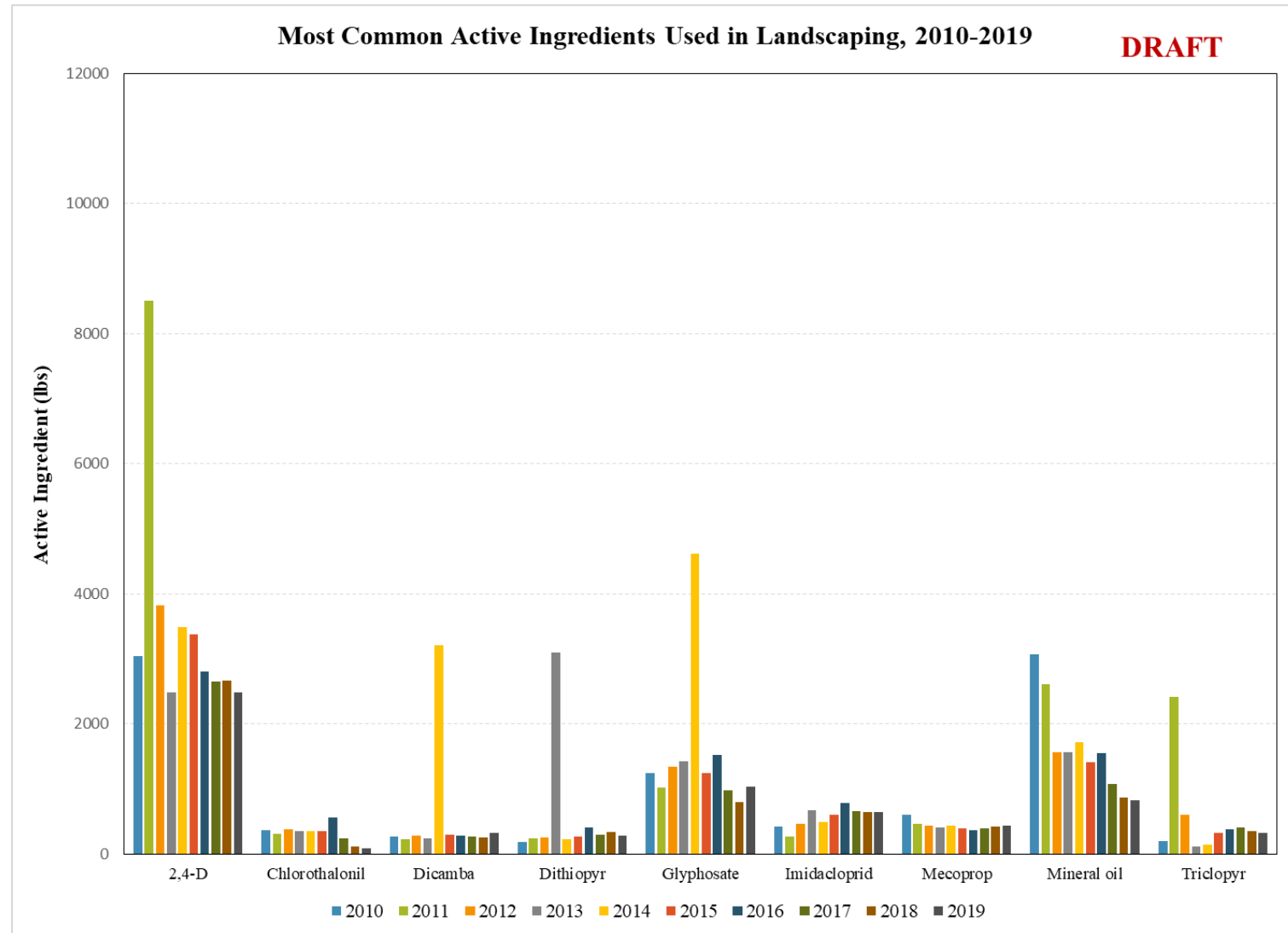
Glyphosate by treatment type



Forestry



Lawncare and ornamentals



Glyphosate Usage

- Has remained about the same = 35,000 pounds of active ingredient used (*does not account for homeowner use)
- We have seen an increased use in glyphosate in the forestry/invasive plant areas almost double (1500 pounds to now at 2600-2800 pounds).
- Other use categories appear to be the same (+/-)

Glyphosate and Cover cropping

- Based on VT DEC numbers in SFY2020, 26,750 acres of cover crop were implemented through state and federal programs. This does not include cover crop implemented by farmers without financial assistance.
- According to NASS in 2019, there were [81,000 acres of corn planted in Vermont](#).
- Roughly, 1/3 of Vermont's corn was cover cropped in 2019.
- Estimated 25-30% reduction of P loss, dependent on slope of land, when cover cropped.

Glyphosate and P calculation

The standard rate of glyphosate is 0.75 lb a.e. per acre. The maximum rate is 1.50 lb a.e. per acre

Glyphosate acid by mass contains 18.3% P

1 lb per acre application rate equals $1 \text{ lb} \times .183 = .183$ pounds or 2.9 ounces per acre.

Fertilizer Tonnage

- Has remained relatively stable through the past few years: 4000 products registered.

