

Integrated Crop Management Plan

Last Update 2/21/2016

A 5 year crop rotation is our primary IPM strategy. The rotation breaks both weed and insect pest cycles and has been instrumental in our herbicide and pesticide free cropping system. The rotation is as follows.

- 3 years Legume based forage mix (Alfalfa, Clovers, Ryegrass, Fescue, Matua Bromegrass)
- 1 year Corn
- 1 year Barley

Riparian buffers adjacent to cropland with wildflowers and natural habitat for parasitic wasps, birds, and other organisms that eat insect pests.

Prevention is key to our IPM plan.

- We implement hand weeding with shovels, where we dig up noxious weeds right before they go to seed but after they have put the majority of their energy into reproduction.
- 240 of our 275 acres are always covered in forage preventing bare ground for weeds to take over
- Intensive grazing with high stocking densities keeps weeds down
- We spot mow with the rotary mower, large patches of weeds if they come up to prevent them from going to seed. We use the bush hog as a last resort but it can be a powerful tool when weed pressure is high or over too much ground to hand-weed.

Mitigation of Disease Pests in Livestock is achieved through a number of strategies

- Minimal use of synthetic wormers in our sheep is accomplished through the Famacha scoring of the
 eye color. Besides their annual worming schedule, we only worm when ewes or lambs fall below 3 on
 their famacha score.
- Frequent rotation of our grazing animals prevents them from grazing too low and ingesting parasites.
- Rotating sheep finishing fields on an annual basis to prevent parasite eggs from building up
- We spray Effective Microorganims (EM) from Teraganix. This product mitigates Ammonia and Hydrogen Sulfide and the EM out competes other harmful anaerobes and pathogens. This is particularly useful in our winter farrowing system for our swine
- Correct stocking rates and frequent moves allows our animals to never be over-crowded or living in conditions where disease problems are exacerbated.
- If sick animals are diagnosed, they are separated from the herd or flock immediately, treated accordingly, and their treatment is then recorded

^{*}The Corn and Barley fit into a 14th window virtually eliminating the amount of time soil has no cover.