

Proposed Weed Management Strategy for Headwaters Farm

There is a serious weed issue at Headwaters Farm. It is not a new problem, but one that has gotten notably worse over the last couple of seasons. The weed problem results from a variety of factors: farmer impermanence, a robust seed bank, overwhelmed and underprepared farmers, inconsistent and ineffective weed management systems, soil in recovery from past mismanagement, among others. The proposed approaches below are designed to work in concert to improve weed management outcomes for incubator farmers and begin to address the overall weed pressure at Headwaters Farm. The ultimate goal is to provide all new HIP farmers with clean fields and have necessary structures in place to ensure they remain mostly weed free.

Issue	Approach
Extensive existing seed bank	 Longer fallows between incubator farmers (2-3 years) Robust, irrigated summer cover crops Employ perennial or mixed summer/winter cover crop blends, as appropriate Request additional labor support during spring
Farmer Tools, Resources, and Program Policies	 Free farmer access to weeding equipment: Power Ox, string trimmers, flame weeder Explore investments in additional weed management farm equipment Consider allowing non-organic management practices at Headwaters Farm
Farmer Preparedness	 Recruit farmers prepared to leverage resources at Headwaters Farm Internal selection process Selection criteria skewing more toward experience and past farm management Clearer expectations for prospective applicants Greater outreach for larger applicant pools Explore options to make the program more attractive to highly qualified candidates
Farmer Weed Management Knowhow	 More weed tools/equipment trainings Weed management trainings for farmers to better understand systems approach
Farmers are not being given clean fields	 Offer occasional weeding crew support Explore herbicide application during fallows
Nutsedge proliferation	 Trial intensive hog rotations Explore perennial cover crops Look deeper into chemical solutions



Need for greater accountability	 Regular weed management check ins with farmers Detailed EMSWCD expectations on what constitutes acceptable and non-acceptable weed management Clear understanding that unacceptable weeding effort will result in a non-renewal of the lease Emergency staff mowing of neglected beds/fields prior to weeds setting seed
Incentivize effective weed management	 Provide financial incentives for incubator farmers who successfully manage weeds to our standards
Soil health recovery	 Work with soil health experts to explore biological and nutrient balancing solutions to weed issues

This suite of approaches will have implications on the incubator program. While it is impossible to foresee all the impacts, the anticipated implications would include:

- 1. Fewer incubator farmers at any one time.
- 2. Longer durations with land out of production.
- 3. Less diversity in the farm incubator program.
- 4. Concerns from current cohort of farmers, especially if the farmland at Headwaters is no longer managed with organic practices.
- 5. Need for additional staff resources (or a re-thinking of current farm staffing) especially at peak moments of the season, and/or revisiting job descriptions to create capacity. This could also possibly be resolved through contracted services at certain times of year.
- 6. Possible capital investment requests for additional weed management tools or systems.

It is important to note that the implementation of this package of new, amended, or revisited weed management and farmer selection approaches will have a major impact on HIP and Headwaters Farm. Some of these changes will likely require adaptive management—at least for the short-term—and might result in other issues. Ultimately, however, staff believe this level of intervention is necessary to reclaim the incubator program's ability to launch viable, stewardship-focused farm businesses.