October 10, 1977

M E M O R A N D U M

TO: Rob Knapp

FROM: Woody Berryckx

SUBJECT: Agricultural Studies

Here are some slightly re-thought ideas in outline for those considering long range goals for agriculture at Evergreen. I am very concerned that we address the whole problem and look far enough into the future now so that continuity and ambition will be adequately invested into what we do even next year. I hope therefore that you will Xerox my laundry list and send it around to everyone working on this issue. Others may have problems with my ideas and that's fine; but we need to stimulate discussions which explore all the possibilities and which address the root of the problem.

I am also sending you a pair of quickly composed paragraphs proposing and advertising an agriculture program. I feel strangely uncomfortable, proposing a program to which I won't be able to contribute, but the lack of any proposals so far is compelling. Again, let this serve as an idea stimulant. Thanks.

My trip to Europe may generate new ideas as to how Evergreen can make a contribution to this important movement. It should also leave me better informed on the subject I am attempting to teach. I leave in 3 hours.

WD:md

AGRICULTURAL STUDIES AT EVERGREEN

Some identifiable needs to which TESC might be responsive:

1. To explore ecologically sound alternatives to the dead-end technology of industrialized agriculture.

2. To apply academic talents to aid small scale farmers and homesteaders; the people the Lang Grant Colleges forgot about; micro economics, agricultural sciences, a new rural renaissance.

3. To discover and promote an ecologically-adapted agriculture for this special region -- West slope Cascadia.

4. To investigate the biological dynamics of the transition from chemical garming to organic farming. Also explore the connections between soil management practices and plant nutrition to homan health

5. To educate and train practitioners of an appropriate agriculture people who will be:
   a) responsible stewards of the land (the primary responsibility);
   b) productive and successful farmers;
   c) scientists who will continue to evolve and promote an adapted agriculture;
   d) effectively progressive members of their communities.

CAN WE SAY THIS??

Evergreen's objective at this point might be to commit sufficient faculty attention to agricultural studies (in order to) be able to provide learning opportunities at both the beginning and advanced levels which will reflect an innovative approach to real agricultural problems in our region, Western Washington, and the world.

Introductory-Programs:

1. <u>The nature of agriculture</u>: As a human experience (anthropology) as ecological systems (biology), and as political economics. (What is this we call domestication? How can we describe agricultural ecosystems? Is agriculture a sustainable activity or a big evolutionary mistake?)

2. <u>The history of agriculture</u>: Origins, ancient, medieval, modern (industrialized); the present state (how did we get where we are?) Themes to follow could include: the influence of technology on agricultural systems through history, the relationship between agricultural practices and human population, and the effects of agriculture on the soil through history.

3. <u>Current problems</u>: Energy and agriculture -- how dependent are we on cheap fossil fuels for our food production?
   Land use - Land tenure - land reform
   Soil conservation
   Pollution and food contamination

Pollution and food contamination
Genetic vulnerability of crop plants
Economic concentration in rural societies
Mechanization - the social effects.
Decline of the rural community and family
Human health as influenced by agricultural practices.

4. Alternative agriculture: (or "Radical Agriculture")

History: the organic farming movements (all "schools.")
The present state of the "Biological Husbandry" movement
Urban agriculture -- the potential of the home gardener
The cooperative movement -- political economics
Change in diet ("For a Small Planet")
The labor movement and agribusiness
A new populism -- Land reform in America

5. The Science of agriculture

Structure and function of agroecosystems
- nutrient cycles - soil management
- succession - crop rotation
- stability and diversity
- energetics
- the niche
- competition

Entomology and insect ecology - strategies for pest management

Soil science and siol biology - Rhizosphere comensalisms

Plant pathology

Breeding and acnetics

Comparative climatology (Climate ⟷ Natural Vegetation ⟷ Adapted Agriculture)

Appropriate Technology and Solar Energy

Horticulture

Agronomy

Economic Botany

Nutrition

6. Small farm management

The viability of the small farm (?)
Cropping systems
Production economics (production functions, efficiency, accounting, planning staying alive as a small farm)
Marketing
Plant and animal husbandry
Soil fertility management

This list, although far from comprehensive, is probably more than a quarters can come close to covering -- especially when we allow time for gardening and experimenting at the college's organic farm. It should serve as an "Idea Outline" to pick from and build on.

Advanced Programs:

We need to offer opportunities for more in-depth studies which students can apply their work to regional agricultural problems.

We need to be able to use the organic farm as a small experiment station as well as a miniature prototype of an integral small farm system.

We need to be able to pursue grants for basic and applied research directed toward aspects of biological husbandry and small scale agriculture.

We need to begin to serve the people of the region with information on adapted agricultural techniques through some kind of extension (publications, demonstration, consulting through grower organizations and farmer cooperatives).

Lab space continuous research at the farm literature files

grants continuity of faculty interest in agricultural problems promising research undertakings.

Kinda of Activities for the Farm:

1. The small farm system - a healthy prototype of a diverse small farm - gardens - tree crops - woodlot - animals - compost - greenhouse - appropriate technology

2. Experiment station
   Crop varietal evaluation for Western Washington - for organic gardens.
   Insect ecology work (with lab backup).
   Organic soil amendment work - effects on quality of crop, resistance, storage quality yield.
   Crop ecology - the ecological foundations of companion planting, intercropping, and crop rotation.