## GROW BIOINTENSIVE® SUSTAINABLE MINI-FARMING

# 4-Week Farmer Training and Crop Production Course

Jan. 7 - Feb. 1, 2013 -- Willits, California

## INFORMATION FOR APPLICANTS

## Introduction

The world is currently facing a series of challenges that include climate change, soil depletion, water shortages, overpopulation, peak oil and a shortage of farmers. All of these challenges impact the effectiveness and sustainability of the food supply chain that the majority of Americans and urban dwellers around the world have come to rely upon for their food: a chain that has become dependent on large-scale, industrialized, chemical-based, conventional agriculture, and the fossil-fuel intensive fertilizers, pesticides, processing and transportation methods that make them possible.

There is a growing demand among corporate and urban consumers for local, sustainably produced food, and a growing urgency to create a more reliable and less destructive food web as an alternative to the conventional factory farming network we currently rely upon. However, there are also very few farmers with the skills necessary to practice sustainable smaller-scale market farming.

To address these challenges it is necessary to for a farmers to learn to use sustainable, smaller-scale farming methods that will allow them to increase yields while conserving resources and minimizing environmental damage. Farmers educated in these methods will have skills that allow them to thrive in semi-urban farming environments where they will have access to urban markets and business customers, and will provide a solid foundation for creating resilient local food webs that can survive challenges and foster community spirit better than industrialized mega-farms.

Ecology Action has created a 4-week Farmer Training Course that brings together a group of Master Farmers from the US, Latin America and Africa with a combined 125 years of expertise to teach potential market farmers the GROW BIOINTENSIVE Sustainable Mini-Farming method, which is currently in use in over 140 countries around the world, and is particularly well-suited for use by market farmers growing on smaller, semi-urban plots because it provides the tools to achieve high yields at low cost while building soil fertility and conserving precious resources such as water, land and energy. The training sessions will be filmed and used to create an online seminar series to extend the training opportunity to farmers and communities around the world.

This course offers an excellent opportunity for farmers and potential farmers to acquire a wealth of information on the most efficient gardening method we know, gathered from over forty years of research and hands-on practical experience in the field. The program will consist of lecture, discussion and demonstration by the Master Farmers, and will include a full range of information on Sustainability and Efficient Resource Use, Crops and Diet, Fertilization, Compost and Compost Crops, Soil Preparation and Preservation, Seed Propagation, and Income, as well as the perspective to tie all these together. The course content covers introductory, intermediate and advanced material and is divided between classroom lectures and practical fieldwork.

Ecology Action is a non-profit 501(c)(3) organization, and our work is focused on researching and rediscovering the techniques and scientific principles involved in the resource-conserving, life-giving GROW BIOIN-TENSIVE (GB) method. The GB method is a modern, scientific technique based on millennia-old practices for sustaining soil fertility in harmony with nature, and is an important element in creating solutions to the problems of the planet. Our research focuses on growing food and income on a closed-system basis, with soil fertility maintained sustainably from within the garden. Our classes and workshops encourage gardeners across the country and around the globe to find solutions appropriate to their own context. Our goal is to find a way to live lightly on the planet so that the planet's resources can be enjoyed by all.

## Attending the Course: Application/Payment

If you are interested in attending the 4-week course, your online application should be completed by October 21, 2012 at https://www.formstack.com/forms/?1268511-KBtIGQhepF

Participants are encouraged to apply as early as possible, as these courses can fill well in advance. For more information, or if you have difficulty using the online form, please email usat: marielaureroperch@gmail.com

Food and lodging will be provided in Willits, CA near the training site, and are included in participant costs. If you have special requirements, please notify us and we may be able to work with you to provide alternate arrangements; if you have food allergies, we recommend you bring your own food. All tools, supplies and reading material are provided to each participant.

#### **Participant Costs**

Applicants should note that this is an unpaid, fee-based program. Housing and food will be provided at each site; however, other expenses will need to be provided by participants who are accepted to the program, as follows. (Please note that these course fees are non-refundable). Not included in the fee schedule below is personal travel to and from the internship site, which will vary per participant. All participants are responsible for any travel expenses associated with getting to and from this program.

Item	Fee	Description
Tuition and Fees	\$2,800	Per person, participation in 4-week training program
Lodging	\$975	Per person, based on double occupancy of each room, 30 days
Food	\$1,500	Per person, breakfast, lunch and dinner daily for 30 days
Total	\$5,275	Payable to Ecology Action, non-refundable

#### NOTES:

- Tools and supplies are provided for each participant that they can take home upon completion of the program.
- Qualifying participants may be provided with scholarships, up to 50% of total program costs, distributed according to need. If you believe you qualify for financial aid, please
- Accreditation is being investigated through several universities. For an increased fee (TBD), nine units of college credit may be available for this program.

Please bring your own mug for hot liquids, a calculator and 2 pencils. The weather can be unpredictable, so come prepared for varied temperatures, warm afternoons, or rain. Waterproof boots with good tread are highly desirable! Generally, tape recorders and video cameras are not permitted at the workshop.

Participants may bring a sheet of information on and/or photos of their garden/project, to be shared; please limit it to one 8.5"x11" sheet and include your name and location.

Feel free to write us about any particular or personal concerns or questions. We will try to be accommodating, if it does not interfere with our work here. Our staff is prepared to stay in touch with participants after the training course is over. Notice of further training opportunities, such as Teacher Certification workshops, will be given in the Ecology Action Newsletter.

#### **About the Instructors**

- **Primary Trainer:** John Jeavons is known internationally as the leading researcher and method developer, teacher, and consultant for the GROW BIOINTENSIVE method. He is the author of the best-selling book How to Grow More Vegetables, Fruits, Nuts, Berries, Grains, and Other Crops Than You Ever Thought Possible On Less Land Than You Can Imagine (Ten Speed Press), which has gone into eight editions in seven languages, plus Braille. There are over 550,000 copies in print worldwide. He has authored, co-authored or edited over 40 publications on this high-yielding, resource-conserving Biointensive approach, including a five-part, peer reviewed article that appeared in The Journal of Sustainable Agriculture. Jeavons' food-raising methods are being used in over 140 countries and by such organizations as UNICEF, Save the Children, and the Peace Corps. Jeavons advises students, teachers, gardeners, local producers, and representatives of private, non-profit and governmental organizations, and is interested in cross-cultural exchange of agricultural methods globally. The comprehensive and sustainable cropping system developed by Jeavons enables people in all regions of the world to grow a balanced diet on a small plot of land. Former U.S. Secretary of Agriculture Bob Bergland said of his work, "There are probably a billion people in the world who are malnourished. The Jeavons approach could enable that segment of the population to feed itself adequately for the first time ever. That would be a remarkable development in this world, and would do more to solve the problems of poverty, misery and hunger than anything else we've done."
- Lead Trainer 1: Steve Moore is an Assistant Professor of AgroEcology, Elon University, Elon NC, and has successfully farmed for over 40 years in Pennsylvania and North Carolina. He holds a Masters Degree from NC State University and has over 15 years of experience with GROW BIOINTENSIVE, is a member of the board of directors of Ecology Action, has been a member of the board of Directors of PASA (Pennsylvania Association of Sustainable Agriculture) and Farm Manager at the Center for Environmental Farming Systems (CEFS) at North Carolina State University. He has special expertise in farming and food system energy use, intensive agriculture and protected production. He is an Associate Editor for the peer reviewed Journal of Renewable Agriculture and Farming Systems. He has lectured and consulted widely, including coordinated teaching of GROW BIOINTENSIVE workshops with John Jeavons.
- Lead Trainer 2: Juan Manuel Martinez-Valdez is the director of Ecología y Población, (ECOPOL), Ecology Action's nonprofit affiliate in Mexico and Central and Latin America for over 20 years. ECOPOL teaches families to raise food Biointensively. As a result of ECOPOL's initiatives Biointensive agriculture has gained a secure foothold in most Latin American countries, with sustainable food-growing techniques being conveyed to non-profit organizations, trainers, food producers, smallholder farmers and indigenous people. It is estimated that millions of family-scale farmers have benefited from this training, increasing yields and income, improving health, and greatly decreasing the quantity of external inputs (including water and imported fertilizers) needed to successfully grow food.
- Lead Trainer 3: Samuel Nderitu is the Co-director of the GROW BIOINTENSIVE Agriculture Center of Kenya (G-BIACK), one of Ecology Action's African affiliate programs. Samuel is a graduate of the 2-Year Biointensive Training Program provided by another of Ecology Action's African partners, Manor House Agricultural Centre (MHAC) in Kenya. Samuel is an expert in Biointensive agriculture, with a primary focus on community development. Samuel and his wife Peris (also a MHAC graduate) founded G-BIACK in 2008 as a community based organization. Since then they have expanded what was once a small farm into a thriving demonstration and training center for Biointensive agriculture and sustainable community development among thousands of small scale farmers in the Central, Eastern, and Nairobi provinces in Kenya. As a result of the these efforts, an inspirational ripple effect is being created as farmers around the region learn to grow more food, build soil fertility, conserve resources and create community food security.

- Lead Trainer 4: John Beeby has studied soil fertility for over 20 years and is currently pursuing a M.Sc. at Cornell University on the potential of biochar to reduce arsenic toxicity in soils. A former Ecology Action staff member, John is an expert in Biointensive agriculture and sustainability, Ecology Action's main soil fertility advisor, and the creator of Harvest Planner, a unique online program which helps farmers plan and grow nutritionally complete diets sustainably. He is the editor of From The Field, associate editor of the journal Renewable Agriculture and Food Systems (Cambridge Press) and author of several publications, including the books Future Fertility and Test Your Soil With Plants! He is currently working to catalyze a website to share GROW BIOINTENSIVE teaching materials, developing experiments in Kenya and Latin America on one-time fertilizer applications for long term improved soil fertility, and making organic fertilizer recommendations for Biointensive farmers.
- Trainer: Jake Blehm is the Assistant Executive Director at Ecology Action in Willits, California. He has worked in sustainable and organic agriculture for over 25 years, working in over 30 countries and visiting an additional 20 countries for agricultural service-learning and education, volunteering with organizations such as ACDI/ VOCA and Winrock International. He has worked in Bangladesh, Vietnam, Bulgaria, Mali, Ghana, Cambodia, Guatemala, Honduras and several other developing countries. He began his career as a biological control producer and consultant, and later moved into leadership and organizational development work with agriculturalists. He is an alumnus of the California Agricultural Leadership Program, and was the Director of Programs for the California Ag Leadership Foundation. Before joining Ecology Action, he was Director of Operations at the Rodale Institute in Kutztown, Pennsylvania. Jake received his B.S. in Agricultural Business/Economics at Colorado State University, his M.B.A. in Organizational Development from California Lutheran University and a Certificate in International Management from the Thunderbird School of Global Management.
- **Trainer:** Megan Meyers is the Executive Assistant to John Jeavons at Ecology Action in Willits, California. She is an expert in the techniques specific to GROW BIOINTENSIVE data collection, and has taught many interns and workshop participants to use this important tool.

"If new young farmers do not step forward to replace older retiring farmers, ownership of land and other farm assets may be concentrated into fewer, ever-larger operations."

– USDA representative Fred Gale in his paper, America's Aging Farmers: Who Will Take Their Place?

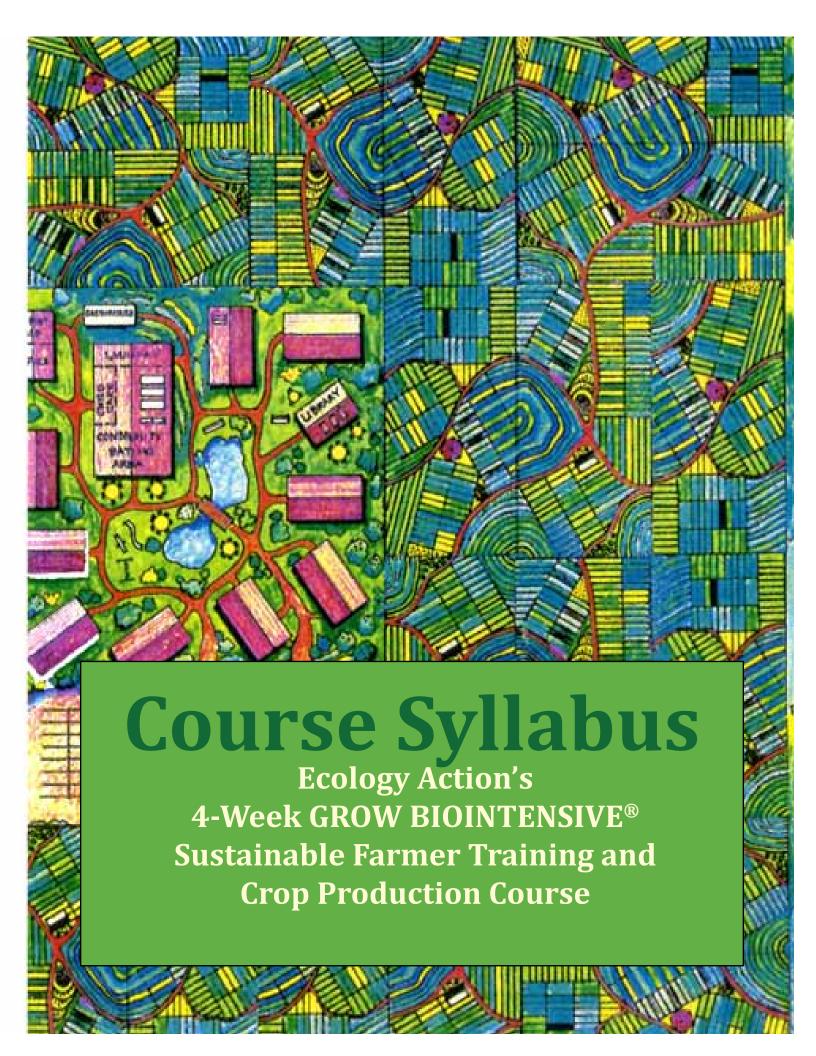
"If we do not repopulate our working lands [with farmers],

I don't know where to begin to talk about the woes [that will result]."

- U.S. Dep. Secretary of Agriculture Kathleen Merrigan (Washington Post, April 2012)

"What Biointensive can make possible isn't a seamless transition (to farming),
because soil and skills need to be built up. It cannot make the transition easy and safe, but it can make it
easier and safer. ... The choice is ours — we can have a century of increasing desertification
and increasing scarcity of per capita resources, farmable soil and food, or we can transform the current
global challenge into a situation of abundance — of enough for everyone."

— John Jeavons, Director of Ecology Action



# **Ecology Action's 4-Week GROW BIOINTENSIVE Sustainable Farmer Training and Crop Production Course**

# **Syllabus**

#### **Instructors**:

- John Jeavons, Executive Director, Ecology Action, Willits, CA
- Steve Moore, Director, Agroecology Program, Elon University, Elon, NC
- Juan Manuel Martinez Valdez, Director, ECOPOL, and Director, GROW BIOINTENSIVE Pan-Latin America Program, Al Culco,
- Samuel Nderitu, Co-Director, G-BIACK, Thika, Kenya, East Africa
- John Beeby, Soil Specialist and Creator, Harvest Planner, Ithaca, NY
- Jake Blehm, Assistant Executive Director, and Entomologist, Ecology Action, Sonoma, CA
- Megan Meyers, Data Collection Specialist and Executive Assistant to John Jeavons, Santa Rosa, CA

#### **Important Dates:**

January 7-February 1, 2013

Applications Due: October 21, 2012

Selected Participant Notification: November 7, 2012

Readings (~40 hours/less than 1 hour/day) Begin: November 14, 2012

Readings Completed: January 4, 2013

#### **Location:**

Willits, CA; Exact Location TBA

#### **Course Description:**

Food production issues, concepts and techniques of GROW BIOINTENSIVE (GB), organic and conventional food production will be discussed. Topics will include: soil and resource management, closed loop fertility, personal diet design, compost, pest management and planning and planting of crop cycles, as well as agricultural leadership and entrepreneurial skills. Biointensive food production will be emphasized. Biointensive is a millennia-old technique used by various civilizations that has been developed to address sustainable food production. It is widely promoted by many development NGOs including the Peace Corps, and is an excellent technique for use in semi-urban market farm settings. This course will have full academic rigor coupled with extensive hands-on learning.

#### **Course Introduction:**

Food and farmable soil are not only essential but will be a defining issue of the future. Many factors compromise food production and availability. These include: increasing population, land loss, land degradation (salinity, erosion, etc.), resource constraints (energy, phosphates etc.) and, very importantly, water. Sustainable production of food will be necessary to meet these challenges in the near future and beyond. It is often said that all politics are local, so is sustainable food production. This course seeks to inspire and empower each of us, our own families and communities and reach out to assist others in the development of sustainable food production and to assist new market farmers to develop the skills they need to succeed in producing high-quality food affordably and sustainably. This course will lay the foundational concepts, tangible skills and detailed knowledge toward that end. The principles of topics will be given before hands on learning.

#### **Expected Learning Outcomes:**

- 1) Understand the current and future food situation as it pertains to market farmers
- 2) Understand the basic components of a sustainable food system and reinforce them by field practice.
- 3) Develop agricultural leadership and entrepreneurial skills to market farm products and promote sustainable agriculture among customers and their communities.
- 4) Design a personal sustainable diet and understand how to sustainably raise food for marketing.
- 5) Compare the sustainability of chemical-based, standard organic and biointensive food production.
- 6) Demonstrate rigorous and systematic analysis for environmental inquiry.
- 7) Attain GROW BIOINTENSIVE<sup>sm</sup> basic level certification.

#### **Required Publications (provided):**

#### Books:

How to Grow More Vegetables, 8th ed.

The Sustainable Vegetable Garden

The Backyard Homestead, Mini-Farm & Garden Log Book

One Circle

**Future Fertility** 

Test Your Soil with Plants

The Nature and Properties of Soils

#### Videos:

DVD - GROWBIOINTENSIVE A Beginner's Guide in 8 Easy Sessions

John Jeavons Google Talk: http://www.youtube.com/watch?v=afHd9EhsJ1U

#### Manual:

**Ecology Action Workshop Manual** 

#### **Booklets**

Biointensive Mini-Farming: A Rational Use of Natural Resources

Cucumber Bonanza

**Examining the Tropics** 

Growing and Gathering Your Own Fertilizer

Growing to Seed

The Complete 21-Bed Biointensive Mini-Farm

One Basic Mexican Diet

Garden Research for Food and Flavor

Dried, Cut and Edible Flowers for Pleasure, Food and Income

Biointensive Micro-farming: A Seventeen Year Perspective

Micro-Farming as a Key to the Revitalization of the World's Agriculture

Comprehensive Definition of Sustainability

One Basic Kenyan Diet

Learning How to Grow All Your Own Food A Supplement for Booklet 14

Growing Medicinal Herbs in as Little as Fifty Square Feet — Uses and Recipes

The Smallest Possible Area to Grow Food and Feed

GROW BIOINTENSIVESM Sustainable Mini-Farming Teacher-Training & Certification Prog.

Designing a GROW BIOINTENSIVE® Sustainable Mini-Farm

GROW BIOINTENSIVE® Composting and Growing Compost Materials

Grow Your Own Grains

Food for the Future, Now

Low-Natural Rainfall Growing

An Experimental Complete 33 Bed GROW BIOINTENSIVE® Mini-Farm: Fertility, Nutrition, & Income

Another Way to Wealth

GROW BIOINTENSIVE Apprenticeship Possibilities (booklet)

Composting for the Tropics

Composting in the Tropics

Other Publications:

Seed to Seed, 2nd ed., Suzanne Ashworth, 2002.

Saving Seeds, Marc Rogers, 1990

#### **Overview of Lecture Topics Covered:**

These are the proposed topics and dates to be covered during the semester. Both topics and dates may vary during the course. Classes are from 9 a.m. to Noon and 2 p.m. to 5 p.m. with two hours off for the mid-day meal. Students are required to read the assignments prior to the lecture and are accountable (on assessments) for each related. Please stay current in your readings. They are a key component of success in this course!

## **Daily Schedule**

(Topics, Times and Instructors Subject to Change)

Key to Teacher Abbreviation in the Schedule:

JB—John Beeby

JBl—Jake Blehm

JJ—John Jeavons

JM—Juan Manuel Martinez Valdez

MM—Megan Meyers

SM—Steve Moore

SN—Samuel Nderitu

Codes: (SM-1) = Steve Moore/1 Hour

-When more than one instructor is involved, the underlined instructor is the lead instructor-

## Week 1—Topics (Teacher-amount of time):

#### Monday, January 7:

Morning

Introduction to the Course (SM-3/4),

World Food/Soil Situation Including "29th Day (JJ-1/4),

Sustainable GROW BIOINTENSIVE vs. Organic vs. Conventional (JJ, SM-1),

Soil Genesis/UC-D Masters Thesis/Worldwide Loss of Soil and a Possible Solution (JJ-1/4),

Soil and Fertility (JB & JJ-3/4)

Afternoon

Soil (JB & SM-1 1/2),

Soil Testing Including Testing With Plants (JB & JJ-1 1/2),

#### **Tuesday, January 8 (8:30-5:30 Day):**

Morning

Biologically-Intensive and Related Food-Raising History (J-1),

Philosophy and How It Effects Our Planning and Yields (JJ-1),

Sustainability Including Organic Matter and Mineral Aspects Including Biosphere II Experience (JJ-1), *Afternoon* 

Soil Preparation Theoretical (JB-1),

Assignment of Course Papers + Computers and Internet (SM-1),

Soil Preparation Practical Field Work #1 (JJ, SM, JB-2): DD, U-Bar, Broad Fork and Soil Testing

#### Wednesday, January 9:

Morning

Diet, Solving the Diet/Form 2 (SM),

Diet Design from the Heart with 60/30/10,

Designing with the Mind, Designing with the Mind and Heart and Model Units (JJ-1/2),

Using the Master Charts and Crop Personalities (JJ-1),

Afternoon

Diet Design (Forms 7 and 10) (SM-1),

Compost (JJ-1 1/2),

Soil Nutrient Dynamics #1 (JB-1 1/2)

#### Thursday, January 10:

Morning

Greenhouse and Tunnel Food Growing (SM-1),

Cooking Techniques (Haybox, Short Boil, Lorena, Rocket, Solar) (JJ-1/2),

Coppicing for Fuel (JJ-1/2), Soil Nutrient Dynamics #2 (JB-1)

Afternoon

Practical Field Work

#2: Compost Building (SM-1),

Sampling of From the Heart Diet Designs Presentations (Participants-2)

#### Friday, January 11:

Morning

Seed Propagation (SM & JJ-1),

Flats: Increased Yields Plus Water Saving (JJ-1/2),

Plant Spacings/Related Yields/For Maximum Nutrition/For Sale of Produce (SM & JJ-1/2),

Fertilizers/Fertilization/Fertility (JJ & SM-1/2),

Human Waste and Its Place in Future Farming (JB & JJ-1/2)

Afternoon

Practical Field Work #2 (SM, JJ-2): Transplanting/Direct Seeding, Compost and Fertilizer Application, Compost Crops (Form 9) (SM-1)

## Week 2—Topics (Teacher-amount of time):

#### Monday, January 14:

Morning

Companion Planting (SM & JJ-1),

Compost/Cover Crops (JJ, SM-1),

Crop Rotations (JJ-1.2),

Multiple Cropping (SM-1/2)

Afternoon

Practical Field Work #3 (JJ, SM-2): Cold Frame Construction, and

Soil Preparation: DD, U-Bar, Broad Fork, Farm Layout (SM-1)

#### Tuesday, January 15 (8:30-5:30 Day):

Morning

One-Bed Unit Design in Groups (Participants-2 1/2),

Journey in Kenya Video SN-1/2),

Afternoon

Results of Biologically-Intensive Food Growing in Kenya Including Soil Project and Seed Bank (SN-2)),

Cornell University Master's Thesis Test Results Growing Cabbage with Biocides (JJ-1/4).

Presentations of One-Bed Unit Designs (Participants-1 3/4)

#### Wednesday, January 16:

Morning

The Role of Gardens/Mini-Farms/Farms in Food Security (JM. SN. SM & JJ-1).

Results of Biologically-Intensive Food Growing in Latin America (JM-2),

Afternoon

Planning and Farm Plan Assignment (SM & JJ-2).

Harvest Planner (JB-1/Video)

#### Thursday, January 17:

Morning

Practical Watering Principles and Microclimatology (JJ-1),

Irrigation (SM-1),

Low Natural Rainfall Food Growing (1)

Afternoon

Practical Field Work #4 (SM, JJ-2) Cold Frame Construction and Soil Preparation: DD, U-Bar, Broad Fork and Soil Testing Plus Transplanting and Pricking Out,

Planning #2 (JJ, SM-1)

#### Friday, January 18:

Morning

Interim Exam (Participants-2)

Afternoon

Presentations of Course Papers #1 (Participants-4)

## Week 3—Topics (Teacher-amount of time):

#### Monday, January 21:

Morning

Energy Use in Food Production Including Energy Cost of Refrigeration (SM-1),

Special Manual Tools in Food Production (SM-1),

Presentation of Course Papers #2 (Participants-2)

Afternoon Practical Field Work #5 (JJ, SM-2)

Cold Frame Construction and Soil Preparation: DD, U-Bar, Broad Fork and Soil Testing Plus Watering Demo, Presentation of Course Papers #3 (Participants-1)

#### **Tuesday, January 22 (8:30-5:30 Day):**

Morning

Presentations of Form 7 & 9 Farm Design Projects #1 (Participants-3)

Afternoon

Data Collection (MM-2)

and Its Importance for a Better Farm Each Year (JJ & SM with Discussion of Questions from Participants-2)

#### Wednesday, January 23:

Morning

Presentations of Form 7 & 9 Farm Design Projects #2 (Participants-3)

Afternoon

Ouestion and Answer Session (Participants and Instructors-2 1/2),

Assignment of 5-Year Goals Project (JJ & SM- 1/2)

#### Thursday, January 24:

Morning

Presentations of Form 7 & 9 Farm Design Projects #3 (Participants-3)

Afternoon

Income Farming Included Value Added (JJ-1 1/2),

Marketing Approaches, Ag (SM, JBl, JJ-1),

Ag Leadership (JBL-1/2)

#### Friday, January 25:

Morning

Weed Management (SM-1),

Insect Life (JBl, SM, JJ-1),

Ecosystem Creation (JJ-1)

Afternoon

Tour of Ecology Action Site (JJ-3, Including Travel)

## Week 4—Topics (Teacher-amount of time):

#### Monday, January 28:

Morning

Group Project: What If You Had To Grow All Your Food and Income On A Closed-System Basis Six Year sFrom Now?

Plus Presentatons #1(Participants-3)

Afternoon

Participants 5-Year Goals #1 (Participants-3)

#### Tuesday, January 29:

Morning

Presentations of Sixth Year Group Project #2 (Participants-3)

Afternoon

Presentations of 5-Year Goals #2 (Participants-3)

#### Wednesday, January 30:

Morning

Farm Plan Presentations (Participants-3)

Afternoon

Question and Answer Session (Participants and Instructors-3)

#### Thursday, January 31:

Morning

Preparation for Final Exam (All Day)

#### Friday, February 1:

Morning

Final Exam (3)

Afternoon

Preparations for Departure

(Annotated exams and grades to be emailed by March 1.)

Reading and other preparations may be done during any free time:

[Reading List and Timing in Development]

#### ADMINISTRATIVE INFORMATION FOR PARTICIPANTS

**Grading**: A (100-93%), A- (92-90%), B+ (89-87%), B (86-83%), B- (82-80%), C+ (79-77%), C (76-73%), C- (72-70%), D+ (69-67%), D (66-63%), D- (62-60%), and F (<60%).

#### **Student Evaluation:**

Mid-Term Exam	25%
Sustainable Diet Design (Forms 7,9, 10, and Garden Plans)	20%
10 hours of independent garden work (time log and journal narrative)	10%
Paper	20%
Final exam (cumulative)	

**Late Penalty:** A 10 point (one letter Grade) penalty will be given per 24 hrs.period for late projects, papers and exams. The Instructor will discuss allowances for emergency circumstances, where appropriate AND prior to the deadline.

**Schedules and Due Dates:** See weekly/daily class schedule. You are required to read the material prior to each class.

**Attendance**: The policy is simple: you are given 3 absences without penalty. After that, your final grade will be reduced 3% for each additional absence. These absences include illnesses and other typically excused absences, so use them wisely.

Respect for others and the use of technology in Class: Students are expected to act in a manner that minimizes distractions to themselves and others. This includes, but is not limited to, arriving late for class, impromptu class breaks, and other disruptive activities. If a student has a medical or psychological need that requires them to periodically leave the classroom during lecture he/she must provide the instructor with written documentation from a medical professional. Because this class is largely lectures and discussions, it is expected that all students will turn off their cellular phone upon entering the classroom.

Students are encouraged to use all technology available to facilitate and enhance the learning experience. This includes, but is not limited to, the use of computers. Recording devices for taking notes may NOT be used. The use of technology, however, must not be used in a manner that is distracting to the individual, other students, or the instructor. Unless approved by the instructor, the use of computers and other technologies to read electronic mail, receive voice mail massages, view the internet, etc. during class time is strictly prohibited.

Statement on Academic Integrity: Honor code is based on upholding four fundamental values: honesty, integrity, responsibility and respect. Adherence to these values is expected from students in and out of the classroom, and a breach of these values will result in an academic or social honor code violation report. The principle behind academic integrity is that all work submitted by the student must represent the effort and achievement for that individual. Although, this class will have a number of exercises that involve partners and/or small groups, each student is expected to contribute equally to these exercises. Plagiarism will not be tolerated and the Instructor is committed to University principles governing academic integrity as outlined in the Honor Code. Any violation of the honor code, especially plagiarism, lying, cheating, stealing or vandalism, and facilitating academic dishonesty, may result in lowering of your grade or failure of the class. Students who are uncertain about whether specific behaviors or activities in this class are violations of the honor code should contact the instructor immediately.

#### **Students with Disabilities:**

Students with documented learning disabilities requiring special accommodations should discuss their needs with the Instructor at the beginning of the course.

#### **Participant Information:**

A collection of biographies and long-term goals submitted by participants in their program applications will be emailed to all participants one week before the course and hard copies will be available at the course for reference.