

# GROW BIOINTENSIVE® SUSTAINABLE MINI-FARMING

## Four-Saturdays Workshops: Online, Zoom Events

**FEB. 26, MARCH 5, 12 & 19, 2022 AND OCT. 29, NOV. 5, 12 & 19, 2022**

**Ecology Action's annual Spring and Fall Introductory GROW BIOINTENSIVE Workshops will be held over four consecutive Saturdays, Feb., 26, Mar 5, 12 & 19, 2022 and Oct. 26, Nov. 5, 12 & 19, 2022, via Zoom.**

We usually hold our in-person workshops over a single weekend, which requires more of a time commitment from our participants, plus travel time and accommodations. This year, everyone can experience the same wonderful and informative workshop *online* from the comfort of their own homes and gardens! This course offers an excellent opportunity to use the most productive, efficient, and Earth-friendly gardening method we know, and is rooted in almost 50 years of research and practical application. GROW BIOINTENSIVE is currently in use in over 150 countries around the world.

The 4-Saturdays Online Workshop provides a strong introduction to the GROW BIOINTENSIVE (GB) method of small-scale sustainable gardening and farming, which is perfect for a more self-reliant and community-friendly lifestyle. GB uses less water and less space than conventional farming and results in higher yields and better nutritional value. Topics covered include: Sustainability and Efficient Resource Use, Crops and Diet, Soil Fertility and Fertilization, Compost and Compost Crops, Soil Preparation and Preservation, Seed Propagation, and Income, as well as the perspective to tie all these together. The workshop content covers a wide range of introductory material, as well as some intermediate and advanced material. Most of the workshop consists of lectures, discussions, and classroom work. Demonstrations of techniques such as double-digging, pricking out and transplanting will be provided using detailed demonstration videos, with question and answer sessions held after we watch together as a group. Just as GROW BIOINTENSIVE Mini-Farming functions as a whole system rather than isolated techniques, this workshop constitutes a whole, with each section - and each Saturday - building on previous sections; it is therefore important to attend the entire workshop.

Ecology Action is a non-profit organization, working to rediscover the techniques and scientific principles involved in the resource-conserving, life-giving GROW BIOINTENSIVE method. These millennia-old practices are an important element in the solution to the problems of the planet. The first seven years of Ecology Action's research focused on the techniques and economic aspects of food raising, while the second seven years were devoted mainly to 'breaking the code' for a sustainable diet. Our current research focuses on growing one's food and income on a closed-system basis, with soil fertility maintained sustainably from within the garden. Our classes and workshops encourage gardeners from many corners of 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.

To better understand what takes place at the workshops, see the list of presenters and the workshop schedule of activities and topics on the following pages. In order to ensure that everyone leaves the workshop with the fullest range and depth of information possible, we must assume that all participants have read the publications listed under Required Reading on the attached sheet. If you do not already own them, you may register and purchase a full set online at [growbiointensive.org/workshop.html](http://growbiointensive.org/workshop.html).

## WORKSHOP PRESENTERS

### **John Jeavons (JJ) Executive Director and President of Ecology Action and Master-Level Closed-Loop Sustainability GROW BIOINTENSIVE Mini-Farming Certified Teacher**

John has been the Director of the Ecology Action Mini-Farming Program for 50 years since 1972, and is the author of *How to Grow More Vegetables...* on GROW BIOINTENSIVE Sustainable Mini-Farming, which is currently in use in over 150 countries in virtually all climates and soils where food is grown. Versions are available in English, Spanish, German, French, Hindi, Russian and Arabic. It will soon be in Kiswahili and Italian next year. He is author, co-author and/or editor of over 40 Ecology Action publications. His major responsibilities include directing field and library research and education in GROW BIOINTENSIVE food-raising. He advises GROW BIOINTENSIVE projects in countries such as Mexico, Kenya, Russia, India and Nepal as well as all corners of the US. John holds a BA in Political Science with minor emphases in Geography from Yale University. Before coming to Ecology Action in 1972, he worked as a systems analyst in business, government and university settings. He has received the Boise Peace Quilt, Santa Fe Living Treasure, Giraffe, and Steward of Sustainable Agriculture awards for his public service. John's dream is to be a GROW BIOINTENSIVE mini-farmer!

### **Matt Drewno (MD)**

Matt is the Victory Gardens for Peace Mini-Farm Manager and is certified in permaculture, restoration of oak-savanna ecologies and Biointensive food production. After a Bachelors of Architecture from Iowa State University, he founded Rhythmic Water Ecological Design, a permaculture and flow-form design business which served mid-western states. He has been working with Ecology Action since 2010 training individuals and communities in the principles of biologically intensive food production and is an Advanced-Level Certified Teacher. His experience includes organic farm-scale food production, design and implementation of food forests, residential-scale food production and community gardens. In 2014, he started the Victory Gardens for Peace Mini-Farm and Seed Bank in the town of Mendocino, CA. He serves on the board of Ecology Action and manages Victory Gardens for Peace, a research, education and demonstration Mini-Farm in Mendocino, California. email: matt[at]victorygardensforpeace.com.



**“The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings.”—Masanobu Fukuoka.**

# TOPICS and SCHEDULE

**NOTES:** An electronic Workshop Manual of lecture notes and key articles is included with registration, and will be emailed to workshop participants. The manual is read-only and cannot be printed out or transferred to other devices. The schedule below is an estimate, and is subject to change.

<b>Saturday 1: 8:30AM -5:30 PM Pacific Standard Time</b> <b>JJ = John Jeavons, MD = Matt Drewno</b>	
8:30 -9:30	Announcements, logistics, evaluations and workshop manual with John Jeavons (JJ). Introductions.
9:30 -10:30	Sustainability Reflection (15 minutes) (JJ) *Sustainability (45 minutes) (JJ).
10:30-10:50	Break
10:50-12:40	Diet from a Farming Point of View: Food Production, Diet Choices and their Consequences (20 minutes) (JJ) GROW BIOINTENSIVE: How it Relates to Sustainability and the World Situation (70 minutes) (JJ) A Power Point Presentation Victory Gardens for Peace (20 Minutes) (MD)
12:40 – 1:20	8 Components (30 minutes) (MD)
1:20 – 2:20	Meal/Rest at Your Location
2:20 – 3:10	History, Philosophy (30 minutes) (MD) Advantages of GROW BIOINTENSIVE (20 minutes) (MD)
3:10 – 3:50	Sustainable Diet Related to the 60/30/10 Design (40 minutes) (JJ)
3:50 – 4:05	Demonstration: Pricking Out: GB Video Annotated (15 minutes) (JJ)
4:05 – 4:20	Demonstration: Compost Building: GB Video Annotated (15 minutes) (JJ)
<b>Saturday 2: 8:30AM -5:30 PM Pacific Standard Time</b>	
8:30 –8:35	Announcements and Logistics (JJ)
8:35 – 8:55	Bed Preparation: GB Video Annotated (20 minutes) (JJ)
8:55 –9:10	Seed Propagation: GB Video Annotated (15 minutes) (JJ)
9:10 – 9:30	40-Bed, 21-Bed, and 1-Bed Units and Upper Knoll Design (20 minutes) (JJ)
9:30 – 9:45	Demonstrations: Double-Digging Demo: GB Video annotated (15 minutes) (JJ)
9:45-10:10	Harvesting: GB Video annotated (25 minutes) (MD)
10:10 -11:30	Choosing Your Crops/Harvesting: GB Video annotated (20 minutes) (MD)
11:30-11:55	Maintaining Your Garden Harvesting: GB Video annotated (25 minutes) (MD)
11:55–12:55	Meal/Rest at Your Location
12:55 – 1:25	Small Group Discussion: What would you have to do to grow all your food within 5 years? (JJ)
1:25 –2:55	Compost! (80 minutes) (MD) 5 Ways to More Compost Power (10 minutes) (JJ)
2:55 – 3:10	Break
3:10 – 4:10	Compost Crops (60 minutes) (MD)
4:10 – 4:40	Growing Grain (30 minutes) (JJ)
4:40 – 5:10	Crops and Seeds (30 minutes) (JJ)
5:10 – 5:30	Non-Pesticide Management (MD)

<b>Saturday 3: 8:30 AM -5:30 PM Pacific Standard Time</b>	
8:30 –8:35	Announcements and Logistics (JJ).
8:35 –10:00	Making the Best Use of the Master Charts (JJ) (Supplies needed: How to Grow More Vegetables, pencil, paper and a calculator)
10:00 –10:30	Talk/Demonstration: Fertilization, Fertilizer Types and Fertility: annotated GB Video (25 minutes)
10:30 –10:45	Break
10:45 –11:45	Talk/Demonstration: Transplanting annotated GB Video (55 minutes) (MD)
11:45 – 12:45	Meal/Rest Period at Your Location
12:45 – 1:15	Water Use and Low-Rainfall Farming: Power Point (30 minutes) (JJ)
1:15 – 1:45	Starting-up a Mini-Farm: Questions and Experiences (30 minutes) (MD)
1:45 – 2:45	Crop Rotations (30 minutes) (JJ).
2:45 – 4:45	Small Group Activity: Planning Your Own One-Bed Unit (Farmer Team). (2:45 - 3:05 Introduction; 3:05 – 4:15 Work in Groups); (4:15–4:45) Reporting & Observations (JJ)
4:45 –5:30	Questions and Answers
<b>Saturday 4: 8:30 AM – 5:30 PM Pacific Standard Time</b>	
8:30 –8:35	Announcements and Logistics (JJ).
8:35 –10:00	The Apple as Symbolic of the World’s Soil, Food and People Perspective
10:00 –10:30	Applesauce as Symbolic of the World’s Rapidly Depleting Food Supply
10:30 –10:45	Break
10:45 –11:45	Real Data at the end of the Growing Year: Yields per Unit of Area And Time per Unit of Water: Calories Produced per Unit of Water Chart in HTGMV/2017. Dry Biomass Produced per Unit of Water Chart in The Next Steps/2022
11:45 – 12:45	Meal/Rest Period At Your Location
12:45 – 1:15	How Would You Grow a Complete Balanced Diet Annually for One Person and for the Related Growing Soil? (30 minutes) (JJ)
1:15 – 2:00	What is Your Vision and What are Your Goals for Your Closed-Loop Sustainable GROW BIOINTENSIVE Mini-Farm (30 minutes) (MD)
2:00 – 3:00	What are the Preconditions for Growing a Complete Balanced Diet Annually for One Person and for the Related Growing Soil?
3:00- 4:00	How Does Interplanting and, especially with Legumes, Make it Possible to Reduce the Growing Area You Need for Food and Soil Self Reliance in Half?
4:00-4:30	What are the Preconditions for Growing All One Person’s Food Annually on 4,000 sq. ft. vs. 2,000 sq. ft. vs. 1,000 sq. ft. (JJ and MD)
4:30-5:00	How Can You Grow a Complete Balanced Diet Annually for One Person and for the Related Growing Soil in the Smallest Area in an Region with 5-inches of Rainfall, when 20 inches are “Needed”? (JJ)
5:00–5:30	Evaluations & Concluding Perspective (Membership, Teacher Training, Newsletter)

<b>DAILY SCHEDULE</b>	
<b>Saturday 1</b>	8:30-1:20 - Workshop; 1:20-2:20—Meal/Rest; 2:20-5:30—Workshop
<b>Saturday 2</b>	8:30-11:55—Workshop; 11:55-12:55—Meal/Rest; 12:55-5:30—Workshop
<b>Saturday 3</b>	8:30-11:45—Workshop; 11:45-12:45—Lunch; 12:45-5:30—Workshop
<b>Saturday 4</b>	8:30-11:45—Workshop; 11:45-12:45—Lunch; 12:45-5:30—Workshop

# REGISTRATION

Registration and payment must be completed online by October 23, 2022. However, we encourage you to register and order your publications as early as possible to allow time to receive and complete the required reading.

**NOTE:** This is an online, Zoom-based workshop, and requires participants to have a computer and access to high-speed internet for the entire event. For those new to the program, Zoom is about as simple to use as YouTube, and allows a group of people to meet virtually. You will receive a link to access the workshop after you register and your payment is processed.

1. **Complete the Online Registration Form** for the Fall 2022 4-Saturdays Workshop: at [growbiointensive.org/workshop.html](https://growbiointensive.org/workshop.html)
2. **Pay for workshop fees.** When you submit your workshop registration, you will automatically be redirected to our online payment page, hosted by PayPal. Make sure to complete payment or your registration will not be processed.  
**Cost to attend is \$380 per person and includes an electronic workshop manual.** Please note: The Workshop Manual is read-only and cannot be printed or transferred to other devices.
3. **Participants must also have access to required reading publications** (purchased separately at a cost of approximately \$40-70 if you do not already own them). Look over the Required Reading (following page), and if you need any of the books or papers, order them.
4. **Your understanding of the workshop will be enhanced if you already know the following about your area:** elevation, first and last frost dates, rainfall by month, temperature—monthly highs and lows. (See forms for these in *The Sustainable Vegetable Garden*. Your County Agricultural Agent should be able to help you find this information.) 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 workshop is over. Notice of further training opportunities, such as Teacher Certification workshops, will be given in the Ecology Action Newsletter.

## **Cancellation Policy:**

1. If a person cancels their workshop registration at least two weeks prior to the first day of the workshop, \$355 of the workshop fee (\$380 minus \$25 processing fee) will be refunded or applied to another Ecology Action workshop during the year that follows.
2. Cancellations that occur less than two weeks before the start of a workshop will result in the loss of the registration fee, or \$355 of the fee may be applied to another Ecology Action workshop during the following year. If you need more information, please contact us at: (707) 459-0150, M-F between 10AM-3PM PST or email [contact@growbiointensive.org](mailto:contact@growbiointensive.org)

# READING

## Workshop Manual

An electronic Workshop Manual of lecture notes and key articles is included with registration, and will be emailed to workshop participants. NOTE: The manual is read-only and cannot be printed out or transferred to other devices.

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## Required Reading (purchase and read before the workshop, and have with you):

- ◆ How to Grow More Vegetables, 9th ed., 2017
- ◆ The Sustainable Vegetable Garden
- ◆ EA Booklet #14: The Complete 21-Bed Biointensive Mini-Farm
- ◆ EA Booklet #26: Learning How to Grow All Your Own Food

Order print and electronic publications at [growbiointensive.org/workshop.html](http://growbiointensive.org/workshop.html)

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## Recommended Reading:

- ◆ One Circle (especially pp. i-vi, 1-72, 125-128)
- ◆ EA Booklet #32: GROW BIOINTENSIVE Composting and Growing Compost Materials

## Other Possible Reading:

### Practical Perspectives:

- ◆ The Backyard Homestead, Mini-Farm and Garden Log Book

### Diet / Compost / Income:

- ◆ EA Booklet #15: One Basic Mexican Diet
- ◆ EA Booklet #25: One Basic Kenyan Diet
- ◆ EA Booklet #28: The Smallest Possible Area to Grow Food and Feed

### Compost Materials / Carbon:

- ◆ EA Booklet #12: Growing and Gathering Your Own Fertilizer

### Research Perspective:

- ◆ EA Booklet #1: Cucumber Bonanza

### Saving Seeds:

- ◆ EA Booklet #13: Growing to Seed (rev. ed. 1999)
- ◆ Saving Seeds, Marc Rogers (Storey, 1990)

### Flowers:

- ◆ EA Booklet #18: Cut, Dried and Edible Flowers for Income, Pleasure and Taste

### Transforming Human Waste:

- ◆ Future Fertility

### Fertility:

- ◆ EA Booklet #29: Test Your Soil with Plants!

### Questions To Ask When Beginning To Farm:

- ◆ EA Personal Booklet #1: Another Way to Wealth

### Teacher Training:

- ◆ EA Booklet #30: GROW BIOINTENSIVE Sustainable Mini-Farming Teacher-Training and Certification Program