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Arrival Activities

Monday, December 3

Time	Event	Location
All Day	Delegates Arriving	via Hotel Shuttle and Personal Transportation
3:00 p.m.	Hotel Check-in Begins	Hotel, Front Desk
3:00-9:00 p.m.	Conference Packet Pickup	Hotel Lobby

General Information

Money

The Crowne Plaza Hotel will not cash personal checks, but they can cash a limited number of travelers checks. There is an ATM located in the lobby. There is also a bank within a 5-minute walk; ask at the hotel desk for directions.

Food

Breakfast, lunch and snacks during the conference (Tuesday-Thursday) are included in your registration. Evening meals Tuesday and Wednesday are not provided. See the hotel concierge or information in your room for additional options in the area. Dinner Thursday night will be provided at the banquet. No meals are provided by ECHO on Monday, December 3.

Languages

English is the official language of the conference, but we are honored to have several non-English speaking delegates among us this year. In order to help them feel more comfortable, we have labeled nametags to identify the languages you speak. If your nametag is not labeled with the correct language/ languages, (English, Spanish, French or Kreyol) please go to any ECHO information table and request a correction.

Green	Speaks English
Purple	Speaks Kreyol
Blue	Speaks French
Red	Speaks Spanish

Headsets for Simultaneous Translation

Simultaneous translation into Spanish and Haitian Kreyol is provided by generous volunteers. Please visit the translation table at the hotel and receive your headset for use during the morning sessions. Translations are not organized for afternoon workshops or evening sessions. If you would like to organize your own, you will need to notify the volunteers at the translation table in order to keep your headset. THURSDAY MORNING, please be certain to turn your headset in after the Morning Session. You will not need it for the Evening Session.

Seating for Translation in Main Session

Those receiving simultaneous translation into Kreyol will be sitting toward the back of the room on the right, and those receiving translation into Spanish will be toward the back of the room on the left side. Look for the "Reserved" signs.

Composting and Recycling

ECHO strives to be “environmentally sensitive” in the way we handle the food service at our conferences. However, until we have a plan that is efficient enough to handle 300 people in a short amount of time and in a cost effective way, we will continue to use as few disposable products as possible. The burning of these products by Florida Power and Light helps to provide energy to the people of this area.

Please use marked compost bins at meals for food scraps and fruit peels, and separate recyclable materials from your other trash and place the items in the marked bins.

Seed Orders

We are pleased to offer 5 free packets of seeds this year to EAC 2012 delegates! Some of you may have already placed your seed order through our website. Others may complete a request form prior to 9:00 a.m. Wednesday to receive the seeds before the end of the conference. An order form and seed selection list is available in your registration packet. If you need assistance in selecting seeds, see ECHO staff members Bob Hargrave, Kimberly Chaps, Tim Motis or Beth Doerr.

Bees, Wasps, and Fire Ants

If you see wasps or a swarm of bees around the farm, please notify someone at an information table immediately. If you are stung, move away from the area as quickly as possible. If the bees are aggressive, go immediately to an enclosed location (building or car) to avoid them. Fire ants nest in the ground and may be anywhere on the farm.

Conference Photo

We will take a group photo of all conference staff and delegates Thursday morning after the main session. The photo will be taken outside the Hotel. Please do not leave the area until the photo is taken. This photo will be available to download by the end of conference at www.echocommunity.org.

Message Board Available

Trying to connect with someone during conference? You can post notes to the message board located outside of the bookstore.

Address Correction Cards

There is a small card in your packet which gives you the option of correcting your contact information or removing your name from the published list. Please return this card to the information table by Thursday at noon so we will be able to include any corrections or omissions before distributing the delegate contact list. The list will be e-mailed to all the delegates following the conference.

2012 Conference DVD Available

DVD recordings of the morning session speakers will be available for purchase Thursday evening following the banquet. The three DVD set is available for \$35.

Free Book Table

Remember to choose as many books as you can carry from the tables of FREE books outside the library. The free books are donated by Christians from the Ft. Myers area with the intent of spreading the Good News! The tables are well labeled. Don't confuse them with the tables of books FOR SALE outside the bookstore or the thousands of books on the shelves of the library and bookstore!

Airport Transportation

The Crowne Plaza Hotel will provide airport transportation to RSW (Fort Myers Airport) for their guests. If you are staying for the Post Conference Workshop, you may need to make special arrangements with ECHO staff, Pete Singer, if you plan to leave ECHO and go directly to the airport.

Travel to other Airports

If you can give a ride or need a ride to Miami or elsewhere in Florida, please see the Message board. The hotel courtesy shuttle will provide transportation to the Greyhound bus station. ECHO takes no responsibility for delegates travel to other locations in the state.

MEDICAL INFORMATION

Medical Emergencies

In the event of injury or illness, proceed to the nearest information table for assistance. Please fill out an incident report. If the incident is an emergency, dial 911 from a cell phone, or 9-911 from an ECHO campus phone, and notify an ECHO Staff person.

First Aid Kits are located at all information tables in addition to all bathrooms, the kitchen in the Main Office Building and the Maintenance Shop. Please fill out an incident report at an information table for any injury.

Nearest Hospital to ECHO

Lee Memorial Hospital
2776 Cleveland Ave.
Fort Myers—Phone 239-332-1111

Directions: West on Bayshore to Cleveland Ave. South (turn left) across the bridge. Hospital will be about one mile ahead on the right.

Nearest Medical Facilities to Crowne Plaza

This Walk-in Clinic is just across the road north of the hotel, ask at the hotel desk for directions.

First Care Medical Center
12995 S Cleveland Ave, Ste 184
Fort Myers—Phone 239-939-2201

The nearest Medical Facilities to Crowne Plaza

Gulf Coast Hospital
12681 Doctor's Way
Fort Myers—Phone 239-768-5000

Directions: Turn South on Bell Tower Drive to Daniels Parkway. Turn left (East) on Daniels Parkway and a little over a mile to Doctor's Way and the entrance to the Hospital parking lot. Follow the signs to the Emergency Room.

Health Insurance Policy—Non U.S. Citizens Only

Health Insurance is included in the registration fees for all international conference delegates. You will have the "evidence of insurance" documents in your packet. Please keep this with you in case of an emergency. If you did not receive the information, and feel you should have, please see someone at the ECHO information table.

GENERAL SCHEDULE

Tuesday—Wednesday

Time	Event	Location
6:30 - 8:00 a.m.	Breakfast	Hotel
8:00 - 11:45 a.m.	Morning Program	Hotel
11:50 a.m.	Shuttles to ECHO	Leaving from Hotel
12:30 - 1:30 p.m.	Lunch	ECHO Farm Pavilion
1:30 - 2:30 p.m.	Afternoon Workshop I	ECHO Farm
3:00 - 4:00 p.m.	Afternoon Workshop II	ECHO Farm
4:15 - 5:15 p.m.	Shuttles to Hotel	Leaving from Shuttle Stop
7:00 - 8:35 p.m.	Evening Program	Hotel

Thursday Schedule

Same as above with the exception of the evening program.

6:30 - 8:45 p.m.	Banquet	Crowne Plaza
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DIRECTIONS BETWEEN CONFERENCE LOCATIONS AND SHUTTLES

Crowne Plaza to ECHO

Exit the parking lot onto Bell Tower Dr. heading toward Daniels Pkwy (past the movie theater)

Turn LEFT (East) onto Daniels Pkwy; go approximately 5 miles

Turn LEFT (North) onto I-75; go 12 miles to Exit 143 Bayshore Rd (SR 78)

Turn RIGHT (East) on Bayshore; go 1 mile to Durrance Rd

Turn LEFT (North) onto Durrance Road; follow the signs

ECHO to Crowne Plaza

Take Durrance to Bayshore Road (SR 78) and turn RIGHT; go 1 mile

Turn LEFT to go SOUTH on I-75; go 12 miles to exit 131 (Daniels Pkwy)

Turn RIGHT onto Daniels Pkwy; go west approximately 5 miles

Turn RIGHT onto Bell Tower Drive; go approximately 1 mile (hotel will be on your right after the movie theater).

We will have two large buses for transportation, however several delegates have volunteered space in their cars to transport people between the Hotel and the ECHO Farm. In the evenings, buses will drop delegates off at the front lobby of the Hotel.

Daily ECHO Bus Schedule

11:50 a.m. Buses leave Crowne Plaza for ECHO

4:15 -5:15 p.m. Buses from ECHO to Crowne Plaza

Hotel Courtesy Shuttle Service

The Crowne Plaza provides 24 hour complimentary van service to locations within five miles and to the airport. See the guest services desk in the lobby for information.

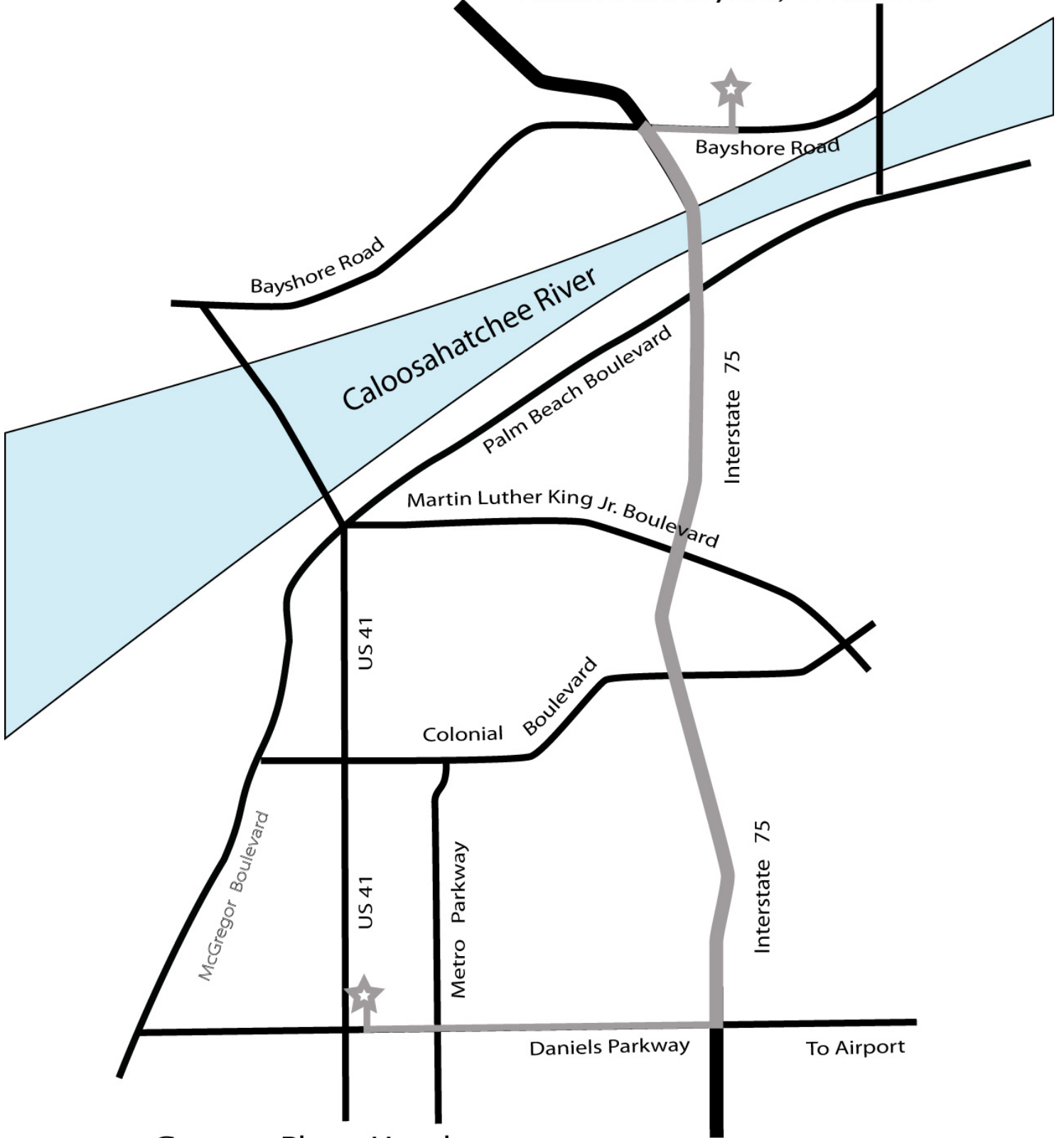
Post-Conference Study Shuttles

All delegates staying for post-conference study must attend a meeting with ECHO staff, Pete Singer, regarding shuttle service to and from the Hotel. Time and place will be announced.

Message Board

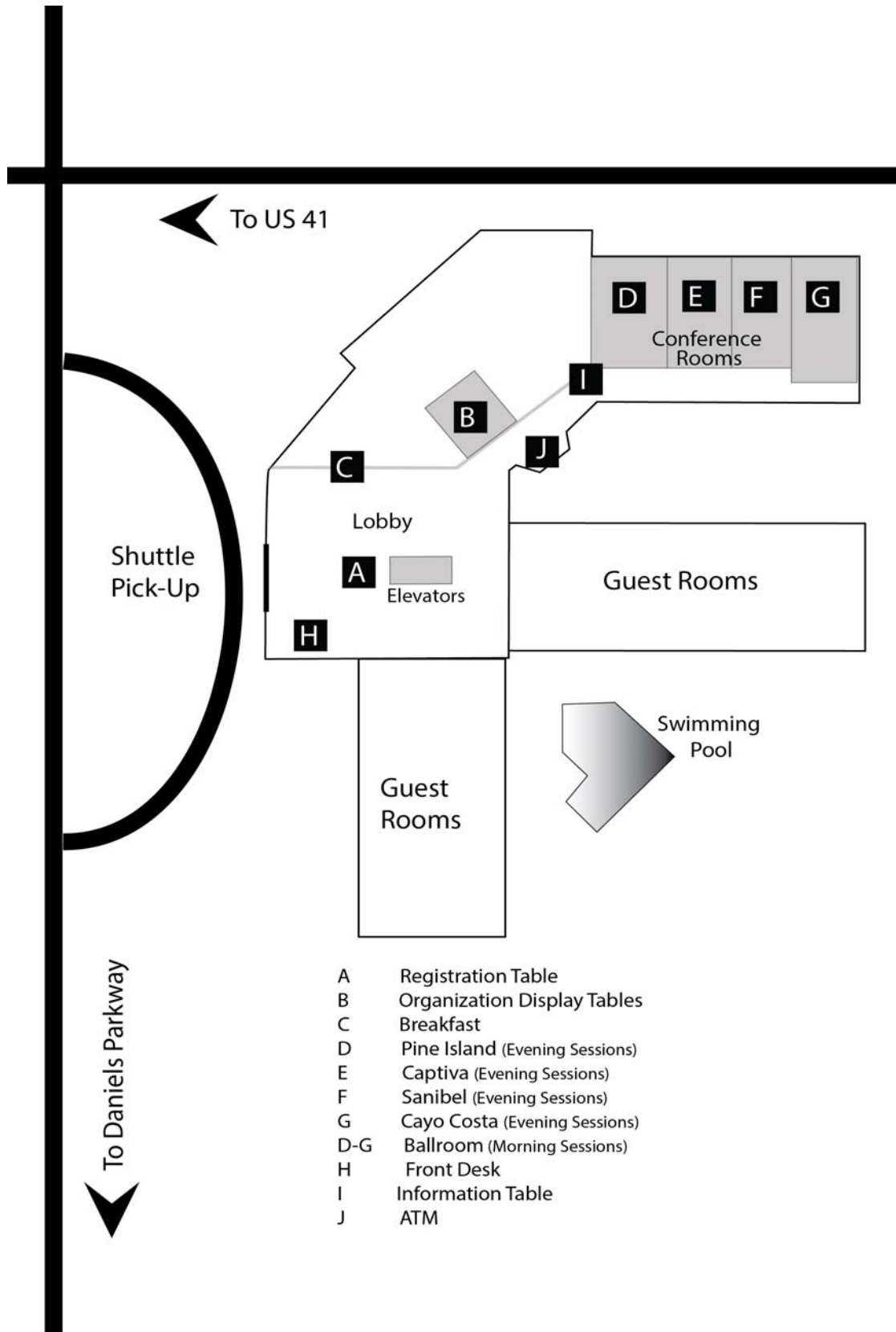
If you can give a ride or need a ride to Miami or elsewhere in Florida, please see the Message board located outside of the bookstore.

ECHO
17391 Durrance Road
North Fort Myers, FL 33917



Crowne Plaza Hotel
13051 Bell Tower Drive
Fort Myers, FL 33907
(239) 482-2900

Map of Crowne Plaza Hotel



- A Registration Table
- B Organization Display Tables
- C Breakfast
- D Pine Island (Evening Sessions)
- E Captiva (Evening Sessions)
- F Sanibel (Evening Sessions)
- G Cayo Costa (Evening Sessions)
- D-G Ballroom (Morning Sessions)
- H Front Desk
- I Information Table
- J ATM

Organization Displays

(Letter B on the Hotel Map)

The following organizations are providing displays at the Crowne Plaza:

Chapin Living Waters

Anamed

Food and Agriculture Organization (FAO)

MEO Group LLC

SEED Ministries

Seed Programs International

Starfysh

H.E.A.R.T.

Appropriate Technology Displays

(Letter G on the Farm Map)

The following organizations are providing displays at ECHO:

Africa Water, Sanitation and Hygiene (WASH) & Disabilities Study

Africa Windmill Project

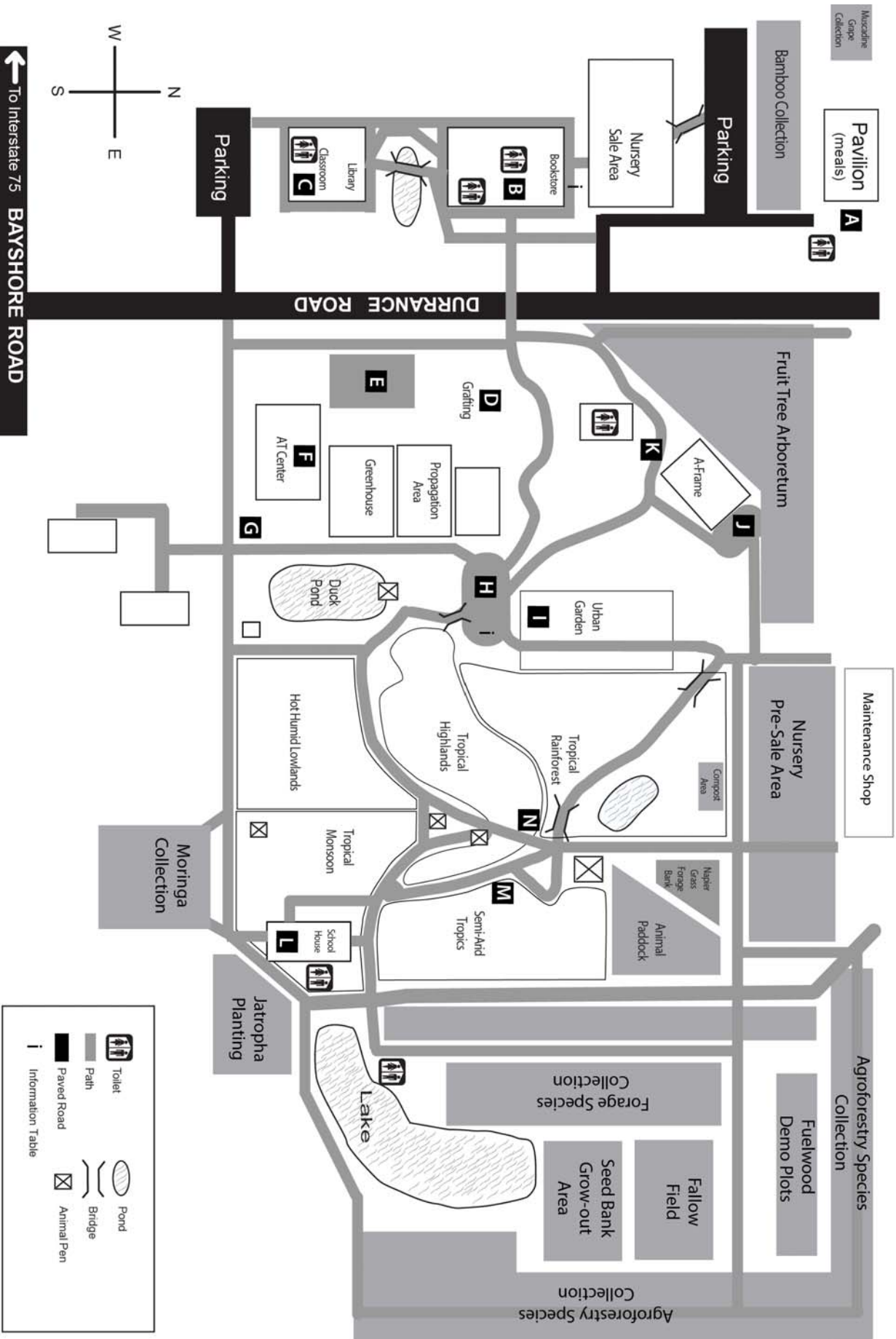
Chapin Living Waters

Rain Catchers

Sawyer Water Filters

A	Pavilion (lunch)	H	Bamboo Courtyard
B	Visitor Reception Center/Bookstore	I	Urban Garden
C	Classroom—Tech/ Library Building	J	Fruit Tree Arboretum (south side)
D	Propagation Area	K	A-Frame Courtyard
E	Lawn	L	Schoolhouse
F	AT Center	M	Semi-Arid Tropics Region
G	AT Organization Displays	N	Tropical Highlands (east side)

ECHO Global Farm



TUESDAY SCHEDULE

- 6:30-8:00 Breakfast
- 8:00-8:15 Welcome — Stan Doerr — President and C.E.O.
- 8:15-8:30 Worship — ECHO Interns
- 8:30-8:45 Devotions — Gene Tate, Living Seeds Initiative
- 8:45-9:00 Announcements — Danielle Flood
- 9:00-9:45 Orchards in Middle Earth: Nonprofit and Commercial Orchard Development in Tandem — Stanley and Tami Brown
- 9:45-10:30 Laying the Foundations for Resilient Livelihoods through a Biblical Approach to Participation and Stewardship — Dr. Douglas R. Brown
- 10:30-11:00 Break and Networking Time
- 11:00-11:45 Understanding the Nutritional Health of Your Community: In What Situations can *Moringa oleifera* Help to Improve Nutrition? — Kathryn Witt
- 11:45-11:50 Announcements — Danielle Flood
- 11:50-12:05 Shuttles leave from hotel
- 12:30-1:30 Lunch
- 1:00-1:15 Groups leaving from pavilion for quick walkthrough of workshop locations for those new to the ECHO Farm.
- 1:30-2:30 Afternoon Workshop Session I
- 2:30-3:00 Break
- 3:00-4:00 Afternoon Workshop Session II
- 4:15-5:15 Shuttles to Hotel — Leaving from Shuttle Stop
- 5:00-7:00 Dinner on your own
- 7:00-7:25 Evening Session I — 25-minute presentations
- 7:00-8:00 Evening Session I — 60-minute presentations/roundtable
- 7:25-7:35 Break
- 7:35-8:00 Evening Session II
- 8:00-8:10 Break
- 8:10-8:35 Evening Session III

TUESDAY MORNING SPEAKERS

<p><u>Orchards in Middle Earth: Nonprofit and Commercial Orchard Development in Tandem</u></p> <p>For 15 years the Central Asia Harvest Project has helped small-scale farmers to start, operate and improve fruit orchards. Now the Project has launched an ambitious plan to expand its reach through a tandem commercial enterprise. How the two work together is both a challenge and an opportunity with lessons for anyone who wishes to combine agricultural development and commercial activities. This talk offers a case study using the CAHP example of fruit orchard development in Central Asia.</p>	<p><u>Stanley and Tami Brown</u></p> <p>The Central Asia Harvest Project is a project of IDEAS (ideasworld.org) with a mission of improving quality of life for rural farm families in Central Asia through an interactive training program and by demonstration of modern orchard systems. We have presented at past ECHO conferences and are honored to be able to offer this update along with some new ideas for utilizing non-profit and commercial development side by side in the agricultural development context.</p>
<p><u>Laying the Foundations for Resilient Livelihoods through a Biblical Approach to Participation and Stewardship</u></p> <p>There has been a lot of talk about resilience lately, but what does it all mean and how should we think about it in terms of agricultural and community development from poverty reduction and improved well-being? In a global context of variability and change – be it economic or environmental – and persistent areas of chronic food insecurity, how can we help people on the path to more productive, sustainable and resilient livelihoods, whilst being good stewards of the gifts God has given? In this talk, Doug will share some insights and experiences as a development practitioner and researcher, examine recent trends in efforts to tackle chronic poverty and food insecurity and suggest a path that is at once faithful to our biblical roots and effective in addressing the root causes of the problems faced by the poor in rural agricultural communities around the globe.</p>	<p><u>Dr. Douglas R. Brown</u></p> <p>Doug Brown is Director, Agriculture and Food Security at World Vision International and responsible for the promotion of sustainable, productive and resilient agricultural livelihoods across the World Vision Partnership, internally through the development of organizational strategy, policy and practice as well as in external relationships. Doug has taught in the areas of international development and economics and conducted research in Cameroon and Kenya focused on the relationship between household resource management decisions, poverty and environmental degradation. Prior to his doctoral studies he worked for over 10 years at the grass roots level in agricultural and community development in the Democratic Republic of Congo. His international experience began through a 4 month cross-cultural exchange to the Philippines. Doug has a Ph.D. in the Economics of Development from Cornell University, a Certificate in Biblical Studies from Tyndale Seminary and a B.Sc. in Agriculture from the University of Guelph. He was born in Edmonton, Alberta, Canada and lives in Charlottetown, Prince Edward Island.</p>
<p><u>Understanding the Nutritional Health of Your Community: In What Situations can <i>Moringa oleifera</i> Help to Improve Nutrition?</u></p> <p>Human eating behaviors vary widely with the resources available and beliefs about which types of foods lead to good health. This talk will address ways to evaluate the resources, beliefs, and nutritional health of communities. In addition, the situations in which the addition of <i>Moringa oleifera</i> leaves to the diet are most likely to be helpful for improving nutrition will be described.</p>	<p><u>Kathryn Witt</u></p> <p>Kathryn Witt has spent most of her career teaching a variety of undergraduate nutrition courses, including maternal and child, community, and medical nutrition. She is passionate about designing nutrition interventions which improve the lives of individuals and communities by blending current science with culturally appropriate, sustainable health care and feeding practices.</p>

TUESDAY AFTERNOON WORKSHOPS I - 1:30—2:30

H	<p><u>Tour of ECHO Farm</u></p> <p>This walking tour of the farm will feature some of the lesser known plants and techniques; for example, perennial vegetables and rooftop gardening techniques.</p>	<p>English—Dr. Martin Price Spanish—Celeste Villarreal Kreyol—Rhoda Beutler</p>
F	<p><u>AT Demonstration Tour*</u></p> <p>This tour will cover the various Appropriate Technology demonstrations located in the AT Center including oil presses, cook stoves, shellers, grinders and more.</p>	<p><u>Beth Doerr</u> is a former intern who returned to ECHO in 2004 after working for 13 years in agriculture and community development throughout the tropics. She currently serves as the Intern Manager and is responsible for the animals, and directing the appropriate technology department at ECHO.</p>
C	<p><u>Raising and Educating Third Culture Kids</u></p> <p>This workshop will be a time to think through and talk about educating and raising the most important resource that God has given us—our children—in a culture other than the one that their parents have come from. What are some of the challenges? What is best for each child? Although each setting and child is unique, there are many ideas and experiences that we can share to help each other in the journey. Ellen will be available for private meetings with parents-to-be throughout the week.</p>	<p><u>Ellen Hargrave</u> is an elementary school and special education teacher. She home schooled her children through elementary school in Kenya where she later served as Africa Inland Mission's Homeschool Coordinator. Currently Ellen is on staff for Africa Inland Mission's Candidate Weeks for new missionaries. There she helps parents make an educational plan for their children. She is also on an international steering committee to help provide support services for parents educating their children in Africa.</p>
K	<p><u>Meet the Speaker</u></p> <p>"Orchards in Middle Earth: Nonprofit and Commercial Orchard Development in Tandem"</p>	<p><u>Stanley and Tami Brown</u></p> <p>See biography from morning talk.</p>

TUESDAY AFTERNOON WORKSHOPS I - 1:30—2:30

L	<p><u>Meet the Speaker</u></p> <p>“Understanding the Nutritional Health of Your Community: In What Situations can <i>Moringa oleifera</i> Help to Improve Nutrition?”</p>	<p><u>Kathryn Witt</u></p> <p>See biography from morning talk.</p>
B	<p><u>Underutilized Tropical Crops</u></p> <p>The world depends on less than thirty plant species for the majority of the food people eat. Yet, there are thousands of species of edible crops. Surely one or more of those have potential to improve the lives of smallholder farmers you are serving. This talk highlights a few of the underutilized crops at ECHO that grow well on our Global Demonstration Farm and have been requested quite consistently by those working overseas. It will touch briefly on some of the advantages of these crops, where they grow best, and how to propagate them. It also covers several factors to consider in introducing a new crop to an area.</p>	<p><u>Dr. Tim Motis</u> grew up in Liberia and worked in Ethiopia for two years before earning his PhD in horticulture at the University of Florida. He then spent three years working as the Director of ECHO's Small Farm Resource Development Project in Haiti. From 2006 to 2008, he served as ECHO's Seed Bank Director. Currently, he oversees ECHO's Agricultural Technical and Research Department.</p>
D	<p><u>Grafting*</u></p> <p>Grafting tropical fruit and nut trees is such a popular subject that every year ECHO has grafting workshops at all afternoon sessions. Topics: Each afternoon at the first session the teaching team will determine the interests and experience level of each delegate, then tailor-make the personalized instruction. The first session is usually instruction and observation. Second session delegates who attended any first session will have opportunity to practice grafting techniques they have learned.</p>	<p><u>Crafton Clift, David and Jenny Burd, Lloyd Marsh</u></p> <p>Crafton Clift is an expert with incredible experience grafting tropical fruits of many kinds. He has traveled to many countries on fruit-tree collection expeditions. David and Jenny Burd are local instructors who operate a small tropical fruit nursery. Lloyd Marsh owns a local citrus nursery and will be teaching citrus budding.</p>
M	<p><u>Chapin Drip Irrigation Bucket Kits</u></p> <p>A simple bucket drip irrigation system is being used worldwide to enable small-scale farmers to produce vegetables during either dry seasons or drought conditions. A demonstration of this drip irrigation system will be presented as well as demonstrations of various other improved gardening technologies to assist in food security programs.</p>	<p><u>Richard & William Chapin</u></p> <p>One of the original inventors of drip-irrigation, Dick Chapin holds patents for over 25 types of drip tape and manufacturing equipment. As a deeply committed Christian he sought to find a way to use drip-irrigation to help the poor and in doing so, developed the gravity-fed Bucket Drip Kit and founded Chapin Living Waters Foundation. Bill Chapin, is the current President of Chapin Living Waters.</p>

*Indicates the workshop is repeated

TUESDAY AFTERNOON WORKSHOPS II - 3:00—4:00

E	<p>Natural Medicine*</p> <p>By the term "Natural Medicine," <i>anamed</i> means the combination of the advantages of traditional herbal medicine with those of scientifically-based modern medical practice. With a limited number of plants a vast range of health problems can be treated.</p>	<p>Dr. Hans-Martin Hirt and Richard Tsimba Kandu</p> <p>Dr. Hans-Martin Hirt is pharmacist and the founder of an international NGO called "<i>anamed</i>" or "action for natural medicine in the tropics". Their main area of research is to have an exchange of knowledge with local people how to produce medicine themselves out of medicinal plants...by this, far money may be left to fight hunger in the family!</p> <p>Richard Tsimba Kandu is a 20-year collaborator of <i>Anamed</i> International. Mr. Kandu is originally from D.R Congo and has resided in Ottawa, Canada since 1994. He is the contact person for <i>anamed</i> Canada.</p>
L	<p>Fruit Tree Propagation*</p> <p>This workshop will present the basics of vegetative propagation of fruit trees in a small-scale nursery setting. Learn from practical demonstrations of a variety of techniques used to multiply major fruit crops in a development context.</p>	<p>Marcie Chapman grew up in the Democratic Republic of Congo and Cameroon. She studied International Agricultural Development from UC Davis. After a two-year internship at ECHO, she joined SIM and spent the next two years working with the Mursi people in Southwestern Ethiopia. In December 2011, Marcie joined the ECHO staff as the propagation manager.</p>
B	<p>Conservation Agriculture: Potential for Agriculture Transformation in Africa</p> <p>In this workshop we will be discussing various types of Conservation Agriculture, more specifically: Conservation Farming, Foundations for Farming and Farming God's Way. We will look at how these forms of CA differ as well as the elements they share. We invite delegates to share their experiences working with CA in the discussion as we share some of ECHO's experience. This discussion will attempt to address the challenges of CA in semi arid Africa and the appropriateness for these areas. Some of the most significant challenges for CA are 1) poor availability of biomass/manures, 2) termite damage, 3) competition for crop residues, and 4) increased labor. We invite your participation and see this workshop as an interactive experience.</p>	<p>Andy Cotarelo, ECHO's Farm Manager, has been on staff since 2006. His background includes undergraduate studies in biology and teaching high school science domestically and abroad for 6 years. Andy first came to ECHO through the internship in tropical agriculture. After his internship, he and his family returned to Senegal. Now back at ECHO, he is responsible for intern training and managing the farm.</p> <p>Tim Watkins is the Head of Agriculture Operations at ECHO, FL and previously served as ECHO's Nursery Manager. Tim has a degree in biology and has studied horticulture at the University of Minnesota and the University of Florida. His agriculture development experience includes a year in the Central African Republic managing the Centre d'Agroforesterie, a Covenant World Mission project among the Gbaya and Fulani farmers of Western CAR.</p>
C	<p>Sawyer Products - Simple, Sustainable, Affordable Water Filtration</p> <p>This presentation will explain Sawyer Products water filtration technology, showcase current successful filtration projects and explain how you can utilize Sawyer Water Filtration Systems. Attendees will be able to participate in a live product demonstration and a question and answer session.</p>	<p>Lara Stilwell and Patrick Hurst represent Sawyer's International and Domestic sales force. Together they bring a wealth of knowledge ready to be shared. They look forward to the opportunity given by ECHO to highlight the importance of Sawyer Water Filtration projects both domestic and abroad.</p>

TUESDAY AFTERNOON WORKSHOPS II - 3:00—4:00

K	<p><u>Meet the Speaker</u></p> <p>"Laying the Foundations for Resilient Livelihoods through a Biblical Approach to Participation and Stewardship"</p>	<p><u>Dr. Douglas R. Brown</u></p> <p>See biography from morning talk.</p>
D	<p><u>Grafting*</u></p> <p>Grafting tropical fruit and nut trees is such a popular subject that every year ECHO has grafting workshops at all afternoon sessions. Topics: Each afternoon at the first session the teaching team will determine the interests and experience level of each delegate, then tailor-make the personalized instruction. The first session is usually instruction and observation. Second session delegates who attended any first session will have opportunity to practice grafting techniques they have learned.</p>	<p><u>Crafton Clift, David and Jenny Burd, Lloyd Marsh</u></p> <p>Crafton Clift is an expert with incredible experience grafting tropical fruits of many kinds. He has traveled to many countries on fruit-tree collection expeditions. David and Jenny Burd are local instructors who operate a small tropical fruit nursery. Lloyd Marsh owns a local citrus nursery and will be teaching citrus budding.</p>
H	<p><u>Animal Systems at ECHO Farm Tour</u></p> <p>A glimpse into the animals and production systems that ECHO showcases on its farm.</p>	<p><u>Cody Kiefer</u> serves as ECHO's Agricultural Resources Editor and Consultant, as well as working with the animals on the demonstration farm. Cody is from rural Alabama and holds a BS in Animal Sciences and an MS in Horticulture, both from Auburn University. He has worked in Honduras, and looks forward to serving the Lord elsewhere in the world. In Honduras, Cody served on an orphanage's farm, where he met his wife, Jess.</p>
M	<p><u>Biogas Troubleshooting</u></p> <p>Biogas is one option for sustainable fuel and fertilizer production. If you are interested in learning about biogas or tried to set-up a biogas system and were unsuccessful, this is an opportunity for you to see the components of a biogas system and ask questions specific to your situation.</p>	<p><u>Craig Bielema</u> completed a degree in Mechanical Engineering from Dordt College in 2007. From 2007-2011 he was a U.S. government employee, working as a test engineer. For 10 years he worked on a farm near his home in Illinois during the summers and winters. He came to ECHO as the Appropriate Technology Intern in 2011 and now serves as the Appropriate Technology Specialist.</p>

*Indicates the workshop is repeated

TUESDAY EVENING SESSIONS

ROOM "D" 7:00 p.m.

ROOM "E" 7:00 p.m.

<p>Underground Orchards in Laos—Alan Bemo</p> <p>Improving what locals already have so that is useable and/or marketable. This has been done with local "wild" varieties of peach, persimmon, guava,, lummyai, and citrus. rambutan. Organized planting, grafting, pruning, and marketing are involved.</p> <p>Alan Bemo is 68 years old and has worked in China, Thailand, and Laos for over 40 of those years. He has worked in the field of evangelism and church planting, and agricultural development, especially in Thailand and Laos. For the 20 years in Laos, where the church is persecuted, the work has been mainly being salt and light while doing agricultural development.</p>	<p>Antibacterial Effect of <i>Moringa oleifera</i> and <i>Moringa stenopetala</i> extracts—Dr. Grace Ju Miller</p> <p>Extracts from seeds and leaves of moringa were tested against 26 strains of bacteria. Extraction were made by grinding tissue in warm water. Moringa was very effective in killing all the gram positive bacteria tested. This could be a simple and affordable source of antibiotic.</p> <p>Dr. Grace Ju Miller is a biology professor at a Chirstian university and conducts research in moringa as a nutritional source and as an antibiotic. She also teaches Sustainable Tropical Agriculture and was the former ECHO Seed Bank director.</p>
<p>BREAK 7:25—7:35 p.m.</p>	<p>BREAK 7:25—7:35 p.m.</p>
<p>Experience of a Goat Development Project for Rural Poverty Alleviation in Guatemala—Dr. Joseph Kim (DVM, MPH)</p> <p>Dairy goat is very unique in resources limited poor small-holder farmers to improve livelihoods through provision of milk for family consumption and surplus for sale to raise income. The animal is also a powerful tool to utilize scarce vegetation in areas not suitable for other forms of agricultural production and easily able to adapt to and utilize marginal forage and survive under harsh conditions.</p> <p>Dr. Joseph Kim has been a veterinary missionary and a visiting professor at the University of San Carlos in Guatemala since 2007 after retirement of 33 years as a veterinary pathologist with the Pennsylvania State Veterinary Laboratory in Harrisburg, Pennsylvania. He has developed a goat extension program and established a veterinary diagnostic capability (laboratory) including bovine and caprine mastitis at the University.</p>	<p>Africa WASH & Disabilities Study: Simple and Low-Cost Technologies for Persons with Disabilities—Nathaniel Kamban</p> <p>Throughout the developing world, persons with disabilities are among the poorest and most marginalized members of society. Since 2007, World Vision and the Conrad N. Hilton Foundation have partnered with the Collaboratory, an applied research and project-based learning center at Messiah College, to fund the Africa Water, Sanitation and Hygiene (WASH) and Disabilities Study (AWDS). The AWDS seeks to improve persons with disabilities overall health and hygiene by increasing the accessibility and usability of WASH facilities in communities targeted by World Vision and the West Africa Water Initiative (WAWI) in Mali, Niger and Ghana.</p> <p>Nathaniel Kamban serves as the Project Manager for the Africa WASH & Disabilities Study at the Collaboratory. Mr. Kamban holds a Master's degree in Development Planning and Environmental Sustainability from the University of Pittsburgh.</p>
<p>BREAK 8:00—8:10 p.m.</p>	<p>BREAK 8:00—8:10 p.m.</p>
<p>Growing Nutritious "Never Die" Moringa Trees in Dryland Environments—Brad Mashburn</p> <p>Home-grown moringa leaves can be a delicious and nutritious addition to rural and urban diets. <i>Moringa stenopetala</i> grows in dryland climates that <i>M. oleifera</i> does not tolerate well. We will look at some of the benefits and challenges of growing this "miracle tree".</p> <p>Brad is a missionary with Converge Worldwide and has worked for several years in the Sahel region of West Africa.</p>	<p>South Africa Research Update—Dr. Tim Motis</p> <p>Tim will present results from ECHO's first two years of research in South Africa. The talk will summarize findings from a legume screening trial, zai pit experiment, and a maize/legume intercropping study. The talk will focus especially on the role that drought-adapted legumes can play in improving soil health when intercropped with grain crops. This research is conducted in partnership with the Howard G. Buffett Foundation.</p> <p>Tim grew up in Liberia and worked in Ethiopia for two years before earning his PhD in horticulture at the University of Florida. He then spent three years working as the Director of ECHO's Small Farm Resource Development Project in Haiti. From 2006 to 2008, he served as ECHO's Seed Bank Director. Currently, he oversees ECHO's Agricultural Technical and Research Department.</p>

TUESDAY EVENING SESSIONS

ROOM "F" 7:00 p.m.

Discussion: Agricultural Changes Incorporated or Adopted Effectively Within Community Development—Tom Post

Come to share what agricultural development "winners" you have encountered in your work. What ideas or techniques are adopted and make the greatest positive difference for people.

Tom Post currently serves as Team Leader for Asia with World Renew (formerly Christian Reformed World Relief Committee CRWRC). He has also worked for World Renew in Honduras, Mexico, Belize, Costa Rica, and Kenya. Tom has his MA in Bilingual Education from Grand Valley State Colleges, his MSc. in Agronomy and Certificates in Latin Studies and Tropical Agriculture from the University of Florida, and his PhD in Development Studies from the University of East Anglia.

ROOM "G" 7:00 p.m.

Discussion: From Blight to Abundance: A Case Study of the Little Urban Church and the Very Big Garden—Flavio Sloat

Through the story of The Fruitful Field Community Garden and Food Forest located at a poor church in a poor neighborhood in South Florida we will explore how growing food starts with growing people from all socioeconomic statuses, creating a social framework and learning environment as an essential pre-condition to crop rich gardening.

Flavio Sloat is a founding member and Executive Director of The Fruitful Field. His role is to develop The Fruitful Field through growing edible plants, encouraging education, valuing creation care, and helping volunteers fulfill their gardening passion. Though a lifelong urban dweller, growing things has deep roots in Flavio's background. His grandfather was a small farmer in Indiana and his childhood also included twelve years in South America where he learned about mangos, tangerines, and chickens at a friend's small farm. Flavio has both a Master's Degree in Sociology from Purdue University and a Law degree from the University of California Davis.

BREAK 8:00—8:10 p.m.

Using Chicken Tractors for Meat Production, Egg Production and Garden Beds—Brad Ward

A funny term to describe a simple and sustainable way to raise both meat and laying chickens. This session will provide an overview of the techniques and methods used to successfully raise over 1,600 meat birds per year in Honduras at a profit of nearly \$1 per bird.

Before coming to work at ECHO, Brad spent six years in Honduras where he, his wife and their two daughters worked closely with local subsistence farm families, organized school gardening projects and managed a diverse farm that helps support a mission hospital and children's home. He grew up in rural Oregon where he raised sheep and participated in 4-H and FFA. He attended Judson Baptist College and also spent 5 years in the U.S. Coast Guard working as a medic. Brad's professional background is in finance and small business management.

BREAK 8:00—8:10 p.m.

Ideas and Resources for Working in Haiti—Rhoda Beutler

Though there are many challenges for those who work in Haiti, there are also many resources, especially if you know where to look! This will be a brief overview of how to connect with parts of the government sector, NGO's that offer resources or services, and private enterprises including seed suppliers and bookstores. It will conclude with a chance to add to the list by sharing your own knowledge of existing resources around the country.

Former ECHO intern Rhoda Beutler is a perpetual learner in the field of agriculture in Haiti. Beginning with language learning, an internship with a Small Farm Resource Development Project, and a role on the agriculture and livelihoods team for an earthquake relief agency, she is now part of an initiative to connect organizations through agricultural networking conferences.

WEDNESDAY SCHEDULE

- 6:30—8:00 Breakfast
- 8:00—8:15 Worship — ECHO Interns
- 8:15—8:30 Devotions — Gene Tate, Living Seeds Initiative
- 8:30—8:45 Announcements, Evaluations and Seed Orders — Danielle Flood
- 8:45—9:00 ECHOcommunity.org Update
- 9:00—9:45 *Artemisia annua*—A Revolution in the History of Tropical Medicine—
Dr. Hans-Martin Hirt and Richard Tsimba Kandu
- 9:45—10:30 Techniques and Methods for Producing Tilapia Using Culturally
Congruent Methods in Rural Haiti — William N. Mebane
- 10:30—11:00 Break
- 11:00—11:45 An Economic Model of Small-Scale Farming — David Erickson
- 11:45—12:05 Shuttles leave from Hotel to Farm
- 12:30—1:30 Lunch ECHO Farm
- 1:30-2:30 Afternoon Workshop Session I
- 2:30-3:00 Break
- 3:00-4:00 Afternoon Workshop Session II
- 4:15-5:15 Shuttles to Hotel — Leaving from Shuttle Stop
- 5:00-7:00 Dinner on your own
- 7:00-7:25 Evening Session I—25 minute presentations
- 7:00—8:00 Evening Session I—60 minute presentations/roundtable
- 7:25-7:35 Break
- 7:35-8:00 Evening Session II
- 8:00-8:10 Break
- 8:10-8:35 Evening Session III

WEDNESDAY MORNING SPEAKERS

<p><u>Artemisia annua—A Revolution in the History of Tropical Medicine</u></p> <p>In tropical countries malaria kills more than a million people every year. The majority are children. That means, a person dies of malaria somewhere in the world at least every 30 seconds. Great advances have been made in pharmaceutical technology, but still many of the poorest people in the world continue to suffer. There is a way forward, it is with <i>Artemisia annua anamed</i> (A-3), which can be grown by small-scale farmers, and by health centers and hospitals in their medicinal gardens. The leaves are then used to make artemisia tea, which has proven itself to be a very effective treatment for malaria.</p>	<p><u>Dr. Hans-Martin Hirt and Richard Tsimba Kandu</u></p> <p>Dr. Hans-Martin Hirt is pharmacist and the founder of an international NGO called "<i>anamed</i>" or "action for natural medicine in the tropics". Their main area of research is to have an exchange of knowledge with local people how to produce medicine themselves out of medicinal plants...by this, far money may be left to fight hunger in the family!</p> <p>Richard Tsimba Kandu is a 20-year collaborator of <i>Anamed</i> International. Mr. Kandu is originally from D.R Congo and has resided in Ottawa, Canada since 1994. He is the contact person for <i>anamed</i> Canada.</p>
<p><u>Techniques and Methods for Producing Tilapia Using Culturally Congruent Methods in Rural Haiti</u></p> <p>The farming of fish is one of the fastest growing agricultural industries in the world for a simple reason - a lot of protein can be produced on relatively small plots of land. This talk will describe various methods of maximizing the production of fish (tilapia) using minimal resources and available infrastructure.</p>	<p><u>William N. Mebane</u></p> <p>During the past 25+ years Bill has been "immersed" in the farming of fish, primarily commercial food fish production and the culture of aquatic organisms for research. In 2002 he made the decision to focus his efforts to help "nutritionally challenged" areas of the world learn to produce fish to help feed themselves. Haiti is where this journey began and continues today; however the techniques are transferable to similar latitudes.</p>
<p><u>An Economic Model of Small-Scale Farming</u></p> <p>Small-scale farming is a surprisingly complex enterprise with multiple areas of risk that also present opportunities for impact. This session aims to introduce some "systems thinking", a couple of simple tools and a measure of humility to our development efforts.</p>	<p><u>David Erickson</u></p> <p>David Erickson serves as the Chief Organizational Development Officer of ECHO, Inc. and coordinates ECHO's international activities. David earned a Master's Degree in Public Policy from Harvard University and undergraduate concentrations in economics, political science and history. He is married, has two grown children and two grandchildren.</p>

WEDNESDAY AFTERNOON WORKSHOPS 1:30—2:30

L	<p><u>Meet the Speaker</u></p> <p><i>“Artemisia annua—A Revolution in the History of Tropical Medicine”</i></p>	<p><u>Dr. Hans Martin Hirt and Richard Tsimba Kandu</u></p> <p>See biographies from morning talk.</p>
H	<p><u>Tilapia Q&A, Experience Exchange</u></p> <p>Meet with Bill Mebane as he answers your questions concerning tilapia production. Bill’s experience and knowledge in all things tilapia will surely benefit anyone endeavoring into aquaculture. This workshop will cover all things tilapia, including alternative feed manufacturing and usage.</p>	<p><u>William N. Mebane</u> has been “immersed” in the farming of fish, primarily commercial food fish production and the culture of aquatic organisms for research for the past 25+. In 2002 Bill made the decision to focus his efforts to help “nutritionally challenged” areas of the world learn to produce fish to help feed themselves. Haiti is where this journey began and continues today; however the techniques are transferable to similar latitudes.</p>
B	<p><u>Creating a Farm Plan—A Road Map for Good Stewardship</u></p> <p>Whether you are growing a single crop on a few acres or integrating multiple resources on hundreds of hectares, a functional Farm Plan is a critical tool for good stewardship and responsive management. In this workshop we will discuss the main components of a farm plan including; defining your vision, assessing resources, prioritization, resource integration, financial planning / management and breaking big projects into manageable tasks. We will also discuss practical ways to use your Farm Plan to stay on track.</p>	<p><u>Brad Ward</u> spent six years in Honduras where he, his wife and their two daughters worked closely with local subsistence farm families, organized school gardening projects and managed a diverse farm that helps support a mission hospital and children’s home. He grew up in rural Oregon where he raised sheep and participated in 4-H and FFA. He attended Judson Baptist College and also spent 5 years in the U.S. Coast Guard working as a medic. Brad’s professional background is in finance and small business management. Brad joined the ECHO staff in September 2012.</p>
K	<p><u>Cover Crop Experiences on ECHO Farm</u></p> <p>ECHO considers green manure/cover crops (gm/cc’s) to be a subject that everyone working with small-holder farmers needs to know something about. Whether used as an intercrop or in rotation, benefits can be impressive. Soil fertility is increased; need for fertilizer is decreased; and leaves of some gm/cc’s are good feed for livestock. All gm/cc’s can contribute to a mulch layer that keeps the soil cool and helps it absorb water, as well as reducing erosion. Weeds are also suppressed and beneficial soil biology levels increase, which is important for plant health. This farm tour will highlight different demonstrations where green manure/cover crops (gm/cc’s) are being used.</p>	<p><u>Andy Cotarelo</u>, ECHO’s Farm Manager, has been on staff since 2006. His background includes undergraduate studies in biology and teaching high school science domestically and abroad for 6 years. Andy first came to ECHO through the internship in tropical agriculture. After his internship, he and his family returned to Senegal. Now back at ECHO, he is responsible for intern training and managing the farm.</p>

WEDNESDAY AFTERNOON WORKSHOPS 1:30—2:30

E	<p><u>Bamboo</u></p> <p>This workshop will describe some of the general characteristics, propagation and care of tropical and subtropical bamboo species. Different methods for bamboo preservation, and techniques for joints and construction will also be discussed. Workshop will include a walking tour of ECHO's bamboo collection.</p>	<p><u>Tim Watkins</u> is the Head of Agriculture Operations at ECHO, FL and previously served as ECHO's Nursery Manager. Tim has a degree in biology and has studied horticulture at the University of Minnesota and the University of Florida. His agriculture development experience includes a year in the Central African Republic managing the Centre d'Agroforesterie, a Covenant World Mission project among the Gbaya and Fulani farmers of Western CAR.</p> <p><u>Craig Bielema</u> completed a degree in Mechanical Engineering from Dordt College in 2007. From 2007-2011 he was a U.S. government employee, working as a test engineer. For 10 years he worked on a farm near his home in Illinois during the summers and winters. He came to ECHO as the Appropriate Technology Intern in 2011 and now serves as the Appropriate Technology Specialist.</p>
D	<p><u>Grafting*</u></p> <p>Grafting tropical fruit and nut trees is such a popular subject that every year ECHO has grafting workshops at all afternoon sessions. Topics: Each afternoon at the first session the teaching team will determine the interests and experience level of each delegate, then tailor-make the personalized instruction. The first session is usually instruction and observation. Second session delegates who attended any first session will have opportunity to practice grafting techniques they have learned</p>	<p><u>Crafton Clift, David and Jenny Burd, Lloyd Marsh</u></p> <p>Crafton Clift is an expert with incredible experience grafting tropical fruits of many kinds. He has traveled to many countries on fruit-tree collection expeditions. David and Jenny Burd are local instructors who operate a small tropical fruit nursery. Lloyd Marsh owns a local citrus nursery and will be teaching citrus budding.</p>
F	<p><u>AT Center Tour*</u></p> <p>This tour will cover the various Appropriate Technology demonstrations located in the AT Center including oil presses, cook stoves, shellers, grinders and more.</p>	<p><u>Beth Doerr</u> is a former intern who returned to ECHO in 2004 after working for 13 years in agriculture and community development throughout the tropics. She currently serves as the Intern Manager and is responsible for the animals, and directing the appropriate technology department at ECHO.</p>
C	<p><u>Meet the Speaker</u></p> <p>"An Economic Model of Small-Scale Farming"</p>	<p><u>David Erickson</u></p> <p>See biography from morning talk.</p>

*Indicates the workshop is repeated

WEDNESDAY AFTERNOON WORKSHOPS 3:00 - 4:00

I	<p><u>Participatory Education Workshop—Small Ruminant Husbandry</u></p> <p>Topics related to sheep and goat husbandry and health, especially from tropical environments, will be discussed via group dialog in an attempt to highlight a participatory educational approach. Bring your ideas and experiences.</p>	<p><u>Paul Rudenberg</u> has worked as a veterinarian, teacher, and learner alongside small farmers in Haiti for twenty years, primarily as an educator in animal husbandry and health. The context of his work has ranged from educational programs for grassroots farmer groups on the island of La Gonave (Service Chretien D'Haiti), rural project management as an organization country director (Heifer International), and in academic leadership at an agricultural college (American University of the Caribbean). He has helped train veterinary workers throughout the country, especially in the south where he lives on a small farm with his wife Marguerite and three children. After leaving this work for over a year to focus on earthquake recovery and the cholera response, Paul has initiated a paper-based distance learning program called "Caribelearn", reaching adults in isolated communities with vocational study and biblical reflection.</p>
K	<p><u>Principles and Practices for Sustained Food Production Tour*</u></p> <p>Tour the ECHO farm with its manager to see and discuss the various farming principles and practices that lead toward improved and sustained food production. Examples of practices include: keeping the soil covered, minimizing soil disturbance, rotating crops, using legumes, incorporating quality compost and fertility amendments. Examples of principles include: emphasis on diversity, systems approach to agriculture, incorporating animals into the farming system, emphasis on extending the growing season, strong dependence on perennials. Delegates will see many dynamic farming systems and techniques including multiple agroforestry systems demonstrated.</p>	<p><u>Andy Cotarelo</u>, ECHO's Farm Manager, has been on staff since 2006. His background includes undergraduate studies in biology and teaching high school science domestically and abroad for 6 years. Andy first came to ECHO through the internship in tropical agriculture. After his internship, he and his family returned to Senegal. Now back at ECHO, he is responsible for intern training and managing the farm.</p>
L	<p><u>Meet the Speaker</u></p> <p>"Techniques and Methods for Producing Tilapia Using Culturally Congruent Methods in Rural Haiti"</p>	<p><u>William N. Mebane</u></p> <p>See biography from morning talk.</p>
C	<p><u>Seed Saving Tips and Techniques—Kreyol Translation</u></p> <p>In evaluating or introducing new crops or crop varieties for a project area, it is often necessary to multiply small amounts of seed to produce enough for local farmers to experiment with. Held at the ECHO Seed Bank, this workshop touches on some basic principles for selecting which crops to multiply seed of, growing a crop for seed production, collecting and storing the seed, and then monitoring quality/viability of stored seeds. It will include information on how development practitioners can store high-value seeds under proper conditions in areas where electricity is not available for dehumidifying or cooling. Note: this is not a talk on grain storage.</p>	<p><u>Dr. Tim Motis</u> grew up in Liberia and worked in Ethiopia for two years before earning his PhD in horticulture at the University of Florida. He then spent three years working as the Director of ECHO's Small Farm Resource Development Project in Haiti. From 2006 to 2008, he served as ECHO's Seed Bank Director. Currently, he oversees ECHO's Agricultural Technical and Research Department.</p>

WEDNESDAY AFTERNOON WORKSHOPS 3:00 - 4:00

N	<p><u>Sustainability, the Process of Collecting Rain Water for Reuse, from a Potable Source to an Agricultural Application with Drip Irrigation. Making an Impact.</u></p> <p>This program will provide an in-depth look at utilizing our natural resources to provide a sustainable way of living for those whom do not have the ways or means of sustaining them selves.</p>	<p>Rick Walker's education and background are in agronomics and soil sciences. He has an extensive history in rural development with an emphasis in storm water management.</p> <p>He is working in conjunction with Chapin irrigation to show the value of drip irrigation with gravity fedorsolar pumping.</p>
J	<p><u>Fruit Tree Management</u></p> <p>This workshop will explore the impact of growth habit and seasonality on fruit production and tree management. Walk through the ECHO's arboretum and learn how to apply these principles to various types of trees.</p>	<p>Tim Watkins is the Head of Agriculture Operations at ECHO, FL and previously served as ECHO's Nursery Manager. Tim has a degree in biology and has studied horticulture at the University of Minnesota and the University of Florida. His agriculture development experience includes a year in the Central African Republic managing the Centre d'Agroforesterie, a Covenant World Mission project among the Gbaya and Fulani farmers of Western CAR.</p> <p>Marcie Chapman studied International Agricultural Development from UC Davis. After a two-year internship at ECHO, she joined SIM and spent the next two years working with the Mursi people in Southwestern Ethiopia. In December 2011, Marcie joined the ECHO staff as the propagation manager.</p>
D	<p><u>Grafting*</u></p> <p>Grafting tropical fruit and nut trees is such a popular subject that every year ECHO has grafting workshops at all afternoon sessions. Topics: Each afternoon at the first session the teaching team will determine the interests and experience level of each delegate, then tailor-make the personalized instruction. The first session is usually instruction and observation. Second session delegates who attended any first session will have opportunity to practice grafting techniques they have learned.</p>	<p>Crafton Clift, David and Jenny Burd, Lloyd Marsh</p> <p>Crafton Clift is an expert with incredible experience grafting tropical fruits of many kinds. He has traveled to many countries on fruit-tree collection expeditions. David and Jenny Burd are local instructors who operate a small tropical fruit nursery. Lloyd Marsh owns a local citrus nursery and will be teaching citrus budding.</p>
B	<p><u>Small Farm Resource Center</u></p> <p>Last year at ECHO's conference three speakers referred to their work with small farm resource centers. Martin first wrote of this approach in the early 1990s as an outgrowth of how he thought he personally would go about being an agricultural missionary (had that been my calling). ECHO encourages many levels of experimentation, from evaluating a pack of seeds from ECHO to having several acres and many experiments as a way to find or evaluate new options to help your community.</p>	<p>Dr. Martin Price first came to ECHO in 1981 with a PhD in Biochemistry, teaching experience at Geneva College, and post-doctoral research in agriculture. During his 27 years of leadership (25 as CEO) at ECHO, Dr. Price shaped ECHO's ministry and initiated the information-sharing, seed bank, experimentation, conferences, training and networking that characterizes ECHO's global ministry.</p>

*Indicates the workshop is repeated

WEDNESDAY EVENING SESSIONS

ROOM "D" 7:00 p.m.

ROOM "E" 7:00 p.m.

<p><u>Newcastle Disease Vaccination—Erwin Kinsey</u></p> <p>Erwin will discuss how a simple practice of prevention can determine the difference in failure and success in flock rearing. Newcastle Disease can decimate poultry business and family flocks, but prevention is simple.</p> <p>Erwin was born and raised on a Vermont dairy and maple farm. He volunteered with the American Friends Service Committee in Mexico for 2 years before finishing a Bachelor of Science in Animal Science from the University of Vermont. He worked for 35 years promoting food security of small, low-income farmers and pastoralists, first with Heifer International in Tanzania and across Africa from 1977-2007, and for Global Service Corps in Tanzania from 2007-2012. Erwin obtained a Masters in Rural Development from the University of London SOAS in 2008 and has written numerous farmer manuals and publications.</p>	<p><u>Surprises that Wait for U.S. Farmers or Gardeners When They Move to the Tropics or Subtropics—Dr. Martin Price</u></p> <p>Many experienced farmers and/or gardeners from temperate climates who are confident based on his or her experience, may be astounded at how poorly some of the initial agriculture ideas pan out in a sub-tropical or tropical climate. This workshop is designed to alert you to some of the surprises that might blindside you.</p> <p>Dr. Martin Price first came to ECHO in 1981 with a PhD in Biochemistry, teaching experience at Geneva College, and post-doctoral research in agriculture. During his 27 years of leadership (25 as CEO) at ECHO, Dr. Price shaped ECHO's ministry and initiated the information-sharing, seed bank, experimentation, conferences, training and networking that characterizes ECHO's global ministry.</p>
BREAK 7:25—7:35 p.m.	BREAK 7:25—7:35 p.m.
<p><u>Leading Volunteers for Maximum Impact—Elizabeth Ross</u></p> <p>How do volunteers fit into the mission and vision of an organization centered on agricultural development? How can short term volunteers be used effectively to carry out a long term goal? How can volunteers build the Kingdom?</p> <p>Elizabeth is the Service Learning Coordinator at World Hunger Relief Inc in Waco, TX, where she coordinates volunteers, tours, and overnight education programs. She has served in volunteer management for organizations including Habitat for Humanity, AmeriCorps, PCUSA, and various churches.</p>	<p><u>ECHO Intern Program—Beth Doerr</u></p> <p>Be a farmer for a year in our living classroom! If you are interested in being an ECHO Intern come to learn more about the program and hear about our new training opportunities. There will also be time for questions about our Internship program and an opportunity for you to introduce yourself if you are considering submitting an application.</p> <p>Beth Doerr is a former intern who returned to ECHO in 2004 after working for 13 years in agriculture and community development throughout the tropics. She currently serves as the Intern Manager and is responsible for the animals, and directing the appropriate technology department at ECHO.</p>
BREAK 8:00—8:10 p.m.	BREAK 8:00—8:10 p.m.
<p><u>Inside ECHOcommunity.org—ECHO staff</u></p> <p>Come learn more about the ECHOcommunity website. Here you will find a wealth of practical and tested information to help you do your work. ECHO staff and other practitioners will help figure out solutions to discouraging problems. Enjoy opportunities to share your hard-won successes with one objective: to help reduce hunger and improve livelihoods around the world. Find out how to connect with other workers in your region, access ECHO technical documents and other research information from ECHO, join a discussion group on a topic relevant to your work or report on your trial seeds. It is our hope that this website will become a valuable tool in your work around the world.</p>	<p><u>Can We Help Village Farmers Increase Success by Looking at All the Risks They Face...and Developing Prioritized Risk Management/Education?—Steve Hodges</u></p> <p>After 2 years of providing training in Farming God's Way, numeracy and small business training, and building capacity of groups of women with small loans and coaching in small agricultural businesses, we've begun to realize that each of these activities are ways to reduce the risks of farm failure. Could a strategically targeted risk management education program, based on the most comprehensive analysis we can do of the risks village farmers face, be more helpful than a scatter-shot approach?</p> <p>Steve worked for 10 years with farmers in rural Appalachia on risk management through value-addition, season extension, and increasing access to markets before moving to South Sudan in 2010 with the United Methodist Church. He helps develop training in Farming God's Way, numeracy for village women, and small business record-keeping and women's group businesses around Yei, South Sudan. Steve currently serves as the coordinator for the FGW Forum of South Sudan. His wife Diantha is a midwife who sets up training for Traditional Birth Attendants, and helps start and train Safe Birth Committees in churches.</p>

WEDNESDAY EVENING SESSIONS

ROOM "F" 7:00 p.m.

ROOM "G" 7:00 p.m.

<p><u>Farm Business Planning Tools and Ideas—Peter Marks</u></p> <p>Every business is different, but sometimes farming is "more different." Helping individuals and groups think about making a profit from selling farm goods is worthwhile but challenging, even for those with a business planning background. We'll cover specific common traps as well as successful techniques, with a focus on numbercrunching. Participants will be engaged in providing their input and experience to help the speaker to correctly apply lessons learned in Appalachia to the world of International development.</p> <p>Peter Marks is President and CEO of Seed Programs International. SPI provides vegetable garden seed and expertise for international development work. Previously, he worked in sustainable agriculture and microenterprise development, providing hands-on business planning support for hundreds of farmers and other entrepreneurs in Southern Appalachia.</p>	<p><u>Conflict and Development—Dr. Barry Gutwein</u></p> <p>The talk/discussion will examine the efficacy of pursuing development in the absence of peace, rule of law, and stability. Case studies will be presented relating to the Sudan, Democratic Republic of Congo, Uganda, and Afghanistan. The main questions to be addressed are what factors or preconditions should be considered before resources are committed to development efforts?</p> <p>Dr. Gutwein has had a lifetime association with agriculture and over 25 years of professional experience. This includes 10 years of work in international emergency humanitarian aid and development. He has a Ph.D. in agricultural engineering and a professional license in civil/agricultural engineering. He is from Indiana, currently resides in Germany, worked extensively in Africa, and has just returned from a one year assignment in Afghanistan.</p>
<p>BREAK 8:00—8:10 p.m.</p>	<p>BREAK 8:00—8:10 p.m.</p>
<p><u>Soil Fertility Changes in a Foundations for Farming System—Danny Blank</u></p> <p>ECHO has highlighted at previous conferences a minimum till farming system (FFF, Foundations for Farming) that uses permanent planting stations for input application and seeding. This talk will highlight recent research conducted in a semi-arid area of Zimbabwe that focused on the rate and quality of soil fertility changes among smallholder farmers who have practiced the FFF method for multiple years.</p> <p>Danny Blank worked at ECHO 1994 through 2009, primarily as its farm manager. The last two years he pursued master studies in a sustainable agriculture program administered by German and Thai universities and will be presenting his master thesis research conducted in Zimbabwe that focused on the Foundations for Farming method. Danny resides with his wife and son in Ft. Myers, FL and is currently a fruit farmer.</p>	<p><u>Sustainable Development through Agricultural Cooperatives in Brazil: A Case Study of COOPAMIDO—Mark Steffler</u></p> <p>Recent literature concerning agricultural cooperatives has demonstrated the economic and social benefits that the cooperatives offer to their membership base as a means to empower small rural farmers; however, research on how cooperatives contribute to a sustainable triple bottom line has received limited attention. Based on the literature and a case study, this paper seeks to identify and provide insight into the extent to which the agricultural business model fosters development as measure by the triple bottom line of social, economic, and environmental sustainability. The case study of the COOPAMIDO cooperative in Laje, Bahia, Brazil is investigated using a proportional quota sample, where a minimum of 15% of all groups relevant to COOPAMIDO were interviewed, to measure the perceptions of how COOPAMIDO contributes to a triple bottom line of sustainable development. We conclude that as long as the cooperative's leadership and members are aligned to promote a triple bottom line, agricultural cooperatives in Brazil have the potential to promote economic growth, include marginalized populations, and conserve the environment; therefore, agricultural cooperatives should be thought of as a useful tool to empower small rural farmers and encourage sustainable development.</p> <p>Mark Steffler holds an MAES in Local Economic Development with from the University of Waterloo with a focus on sustainable agriculture. His interest in agriculture started in his childhood, when he grew up on a family beef farm in Southwestern Ontario, Canada. Since then, his passion from agriculture has grown, and he has worked on projects in Honduras and Brazil.</p>

THURSDAY SCHEDULE

6:30—8:00	Breakfast
8:00—8:15	Worship — ECHO Interns
8:15—8:30	Devotions — Gene Tate, Living Seeds Initiative
8:30—8:45	Announcements & Evaluations — Danielle Flood
8:45—9:30	Learning How to Make the Right Mistakes — Brad Ward
9:30—10:15	Prioritization of Interventions Toward Food Security in Dry Agro-Pastoralist Areas — Erwin Kinsey
10:15—10:30	Break
10:30—11:15	Teaching in the Context of Reconciliation — Paul Rudenberg
11:15—11:30	Announcements and Group Picture
11:55—12:20	Shuttles leave from Hotel to Farm
12:30—1:30	Lunch ECHO Farm
1:30—2:30	Afternoon Workshop Session I
3:00—4:00	Afternoon Workshop Session II
4:15-5:15	Shuttles to Hotel — Leaving from Shuttle Stop
6:30	Banquet Crowne Plaza
6:35	Welcome & Prayer
6:35-8:00	Dinner
7:30-8:00	Banquet Speaker
8:00-8:15	Drawing
8:15—8:25	Closing Worship
8:25—8:45	Closing Prayer of the Nations

THURSDAY MORNING SPEAKERS

<p><u>Learning How to Make the Right Mistakes</u></p> <p>During his six years working in Honduras on two very different agriculture projects Brad made many mistakes — some were good mistakes resulting in discovery and growth , some were bad resulting in diminished relationships and mistrust. In this presentation Brad will share some stories about these mistakes in the hope that you will be more equipped to recognize and avoid the bad mistakes that seem to be so common and also to be encouraged to go out and make some good mistakes of your own.</p>	<p><u>Brad Ward</u></p> <p>Before coming to work at ECHO, Brad spent six years in Honduras where he, his wife and their two daughters worked closely with local subsistence farm families, organized school gardening projects and managed a diverse farm that helps support a mission hospital and children's home. He grew up in rural Oregon where he raised sheep and participated in 4-H and FFA. He attended Judson Baptist College and also spent 5 years in the U.S. Coast Guard working as a medic. Brad's professional background is in finance and small business management.</p>
<p><u>Prioritization of Interventions Toward Food Security in Dry Agro-Pastoralist Areas</u></p> <p>This talk will cover such points as: (a) the Gospel's positive impact upon household livelihoods, (b) nutrition training to diversify diets, (c) promotion of gathering and using indigenous wild vegetables, drying for preserving & storage & reconstitution during the dry season, (d) water harvesting, (e) East Coast Fever immunization, (f) poultry vaccination against Newcastle Disease and protection of chicks during the first month, (g) community animal health workers, (h) ferrocement grain, (i) community land and natural resource management, (j) sand dams and their role to reclaim degraded areas for intensive food production, and (k) village cooperative banks.</p>	<p><u>Erwin Kinsey</u></p> <p>Erwin was born and raised on a Vermont dairy and maple farm. He volunteered with the American Friends Service Committee in Mexico for 2 years before finishing a Bachelor of Science in Animal Science from the University of Vermont. He worked for 35 years promoting food security of small, low-income farmers and pastoralists, first with Heifer International in Tanzania and across Africa from 1977-2007, and for Global Service Corps in Tanzania from 2007-2012. Erwin obtained a Masters in Rural Development from the University of London SOAS in 2008 and has written numerous farmer manuals and publications.</p>
<p><u>Teaching in the Context of Reconciliation</u></p> <p>Christ-centered community development based on faith-sharing, a generous influx of resources, and appropriate agricultural and other technology may still fail if a deep level of community transformation hasn't occurred. Historical wounds (including slavery and colonialism) are often much deeper than generally thought. Their legacy of inferiority, fears, apathy and mistrust, may persist, sabotaging community development.</p> <p>A proposed approach to community transformation beginning with affirmation of creation and God-given human capacity, and on personal/community reconciliation, and an approach to technological intervention focused on respect for local capacity, literacy in native language, and genuine participatory reflection and education will be presented.</p>	<p><u>Paul Rudenberg</u></p> <p>Paul Rudenberg has worked as a veterinarian, teacher, and learner alongside small farmers in Haiti for twenty years, primarily as an educator in animal husbandry and health. The context of his work has ranged from educational programs for grassroots farmer groups on the island of La Gonave (Service Chretien D'Haiti), rural project management as an organization country director (Heifer International), and in academic leadership at an agricultural college (American University of the Caribbean). He has helped train veterinary workers throughout the country, especially in the south where he lives on a small farm with his wife Marguerite and three children.</p>

THURSDAY AFTERNOON WORKSHOPS I 1:30—2:30

<p>C</p>	<p><u>Implementing Small Holder Farm Irrigation in Sub Sahara Africa</u></p> <p>The success and failures of implementing small holder farm irrigation in Sub Saharan Africa Villages to enable sustainable food security at the village level. The technology being discussed will be composting, crop rotation, soil types, irrigation, hand cranked rope and washer pumps, cycle rope and washer pumps, and wind powered rope and washer pumps. The presentation and discussion will go over the successes and failures during developing the technology, implementing farmer trainings, and what happens within the villages one year after Africa Windmill Project completes a village training program.</p>	<p>John Drake is an architect who grew up in Texas and now has a private practice in Winter Park, Florida and attends Summit Church, Orlando. After a short term missions trip to Malawi he returned to Florida and redeveloped the Persian panemone irrigation windmill so it could be built out of materials commonly found in a Sub Sahara African Village. John then returned to Malawi in 2009 and founded the non-profit Africa Windmill Project, which is currently based in Lilongwe, Malawi with a local staff working with other organizations like World Relief, Good Neighbors, and NASFAM.</p>
<p>K</p>	<p><u>Meet the Speaker</u></p> <p>“Learning How to Make the Right Mistakes”</p>	<p>Brad Ward</p> <p>See biography from morning talk.</p>
<p>M</p>	<p><u>Agroforestry</u></p> <p>In this workshop we will present and briefly discuss a definition of Agroforestry. Examples of 2 or more classic agroforestry systems will be presented. There should then be enough time to walk through the Agroforestry demonstration area at ECHO to see trees that have been recommended for Agroforestry systems.</p>	<p>Bob Hargrave has a background of agricultural missions in Kenya, Africa, with expertise in drought resistant crops and famine relief distribution. Bob works with ECHO's Technical Response Unit answering requests from missionaries and development workers overseas. His interests include dryland and tropical agriculture.</p> <p>Tim Watkins is the Head of Agriculture Operations at ECHO, FL and previously served as ECHO's Nursery Manager. Tim has a degree in biology and has studied horticulture at the University of Minnesota and the University of Florida. His agriculture development experience includes a year in the Central African Republic managing the Centre d'Agroforesterie, a Covenant World Mission project among the Gbaya and Fulani farmers of Western CAR.</p>
<p>B</p>	<p><u>Privileges and Challenges of Leadership</u></p> <p>For those who are in leadership positions of the ministry they work in or anticipate being in a leadership position in the near future, this presentation will be focused on both the amazing privilege of being in a leadership position as well as the challenges and responsibilities of leadership. This will be a participatory discussion on the importance of growth as a leader along with “Deployment of Self”, recognition of personal strengths and weaknesses along with what to do about it, the role and relationship with the Board, and the importance of growing a smart and health organization.</p>	<p>Stan Doerr joined ECHO as Deputy Director in April 2004 and was appointed President/CEO of ECHO in June 2006. Prior to coming to ECHO, he and his wife, Beth, worked with the Chapin Living Waters Foundation as Agriculture Consultants which took them around the world working in over 23 countries in Asia, Africa, Latin America, and the Caribbean. In 2000, Stan and Beth joined World Vision and moved to Mauritania to work in Community Development. During the six and a half years that Stan has led ECHO, the organization has grown internationally to having ECHO offices in Thailand, Tanzania, and South Africa. ECHO is currently working with organizations and individuals in 177 countries providing tropical agricultural technical support and training along with seeds for tropical plants and networking opportunities.</p>

THURSDAY AFTERNOON WORKSHOPS I 1:30—2:30

H	<p>Tilapia Q&A, Experience Exchange — Kreyol Translation</p> <p>Meet with Bill Mebane as he answers your questions concerning tilapia production. Bill's experience and knowledge in all things tilapia will surely benefit anyone endeavoring into aquaculture. This workshop will cover all things tilapia, including alternative feed manufacturing and usage.</p>	<p>William N. Mebane has been "immersed" in the farming of fish, primarily commercial food fish production and the culture of aquatic organisms for research for the past 25+. In 2002 Bill made the decision to focus his efforts to help "nutritionally challenged" areas of the world learn to produce fish to help feed themselves. Haiti is where this journey began and continues today; however the techniques are transferable to similar latitudes.</p>
L	<p>Meet the Speaker</p> <p>"Prioritization of Interventions Toward Food Security in Dry Agro-Pastoralist Areas"</p>	<p>Erwin Kinsey</p> <p>See biography from morning talk.</p>
D	<p>Grafting*</p> <p>Grafting tropical fruit and nut trees is such a popular subject that every year ECHO has grafting workshops at all afternoon sessions. Topics: Each afternoon at the first session the teaching team will determine the interests and experience level of each delegate, then tailor-make the personalized instruction. The first session is usually instruction and observation. Second session delegates who attended any first session will have opportunity to practice grafting techniques they have learned.</p>	<p>Crafton Clift, David and Jenny Burd, Lloyd Marsh</p> <p>Crafton Clift is an expert with incredible experience grafting tropical fruits of many kinds. He has traveled to many countries on fruit-tree collection expeditions. David and Jenny Burd are local instructors who operate a small tropical fruit nursery. Lloyd Marsh owns a local citrus nursery and will be teaching citrus budding.</p>
E	<p>Natural Medicine*</p> <p>By the term "Natural Medicine," <i>anamed</i> means the combination of the advantages of traditional herbal medicine with those of scientifically-based modern medical practice. With a limited number of plants a vast range of health problems can be treated.</p>	<p>Dr. Hans-Martin Hirt and Richard Tsimba Kandu</p> <p>Dr. Hans-Martin Hirt is pharmacist and the founder of an international NGO called "<i>anamed</i>" or "action for natural medicine in the tropics". Their main area of research is to have an exchange of knowledge with local people how to produce medicine themselves out of medicinal plants...by this, far money may be left to fight hunger in the family!</p> <p>Richard Tsimba Kandu is a 20-year collaborator of <i>Anamed</i> International. Mr. Kandu is originally from D.R Congo and has resided in Ottawa, Canada since 1994. He is the contact person for <i>anamed</i> Canada.</p>

*Indicates the workshop is repeated

THURSDAY AFTERNOON WORKSHOPS II 3:00—4:00

C	<p><u>Seed Saving Tips and Techniques</u></p> <p>In evaluating or introducing new crops or crop varieties for a project area, it is often necessary to multiply small amounts of seed to produce enough for local farmers to experiment with. Held at the ECHO Seed Bank, this workshop touches on some basic principles for selecting which crops to multiply seed of, growing a crop for seed production, collecting and storing the seed, and then monitoring quality/viability of stored seeds. It will include information on how development practitioners can store high-value seeds under proper conditions in areas where electricity is not available for dehumidifying or cooling. Note: this is not a talk on grain storage.</p>	<p><u>Dr. Tim Motis</u> grew up in Liberia and worked in Ethiopia for two years before earning his PhD in horticulture at the University of Florida. He then spent three years working as the Director of ECHO's Small Farm Resource Development Project in Haiti. From 2006 to 2008, he served as ECHO's Seed Bank Director. Currently, he oversees ECHO's Agricultural Technical and Research Department.</p> <p><u>Kimberly Chaps</u> joined the ECHO staff in May 2010 as the Seed Bank Manager. She is a director on the board of the Florida Seed Association (FSA)and recently spent time in the Echo East Asia Seed Bank. Her background is strong in ministry and youth outreach as well as several local urban movements geared towards nutrition and community development. She is a proud mother of two college-aged sons.</p>
B	<p><u>Meet the Speaker</u></p> <p>"Teaching in the Context of Reconciliation"</p>	<p><u>Paul Rudenberg</u></p> <p>See biography from morning talk.</p>
K	<p><u>Principles and Practices for Sustained Food Production Tour*</u></p> <p>Tour the ECHO farm with its manager to see and discuss the various farming principles and practices that lead toward improved and sustained food production. Examples of practices include: keeping the soil covered, minimizing soil disturbance, rotating crops, using legumes, incorporating quality compost and fertility amendments. Examples of principles include: emphasis on diversity, systems approach to agriculture, incorporating animals into the farming system, emphasis on extending the growing season, strong dependence on perennials. Delegates will see many dynamic farming systems and techniques including multiple agroforestry systems demonstrated.</p>	<p><u>Andy Cotarelo</u>, ECHO's Farm Manager, has been on staff since 2006. His background includes undergraduate studies in biology and teaching high school science domestically and abroad for 6 years. Andy first came to ECHO through the internship in tropical agriculture. After his internship, he and his family returned to Senegal. Now back at ECHO, he is responsible for intern training and managing the farm.</p>
L	<p><u>Fruit Tree Propagation*</u></p> <p>This workshop will present the basics of vegetative propagation of fruit trees in a small-scale nursery setting. Learn from practical demonstrations of a variety of techniques used to multiply major fruit crops in a development context.</p>	<p><u>Marcie Chapman</u> studied International Agricultural Development from UC Davis. After a two-year internship at ECHO, she joined SIM and spent the next two years working with the Mursi people in Southwestern Ethiopia. In December 2011, Marcie joined the ECHO staff as the propagation manager.</p>

THURSDAY AFTERNOON WORKSHOPS II 3:00—4:00

M	<p><u>Dryland Farming</u></p> <p>Dryland farming principles learned from ECHO staff member Bob Hargrave's experience in East Africa. This will be a discussion of the challenges to agriculture, the resources available and strategies for crop production in semi-arid areas.</p>	<p><u>Bob Hargrave</u> has a background of agricultural missions in Kenya, Africa, with expertise in drought resistant crops and famine relief distribution. Bob works with ECHO's Technical Response Unit answering requests from missionaries and development workers overseas. His interests include dryland and tropical agriculture.</p>
I	<p><u>Rooftop Gardening at ECHO</u></p> <p>Demonstration and explanation of numerous rooftop or above-ground gardening methods and their advantages and limitations. Topics will include building shallow beds, shallow pools, wick gardens, tire gardens, fertilizer and water considerations and plant selection.</p>	<p><u>Dr. Martin Price</u> first came to ECHO in 1981 with a PhD in Biochemistry, teaching experience at Geneva College, and post-doctoral research in agriculture. During his 27 years of leadership (25 as CEO) at ECHO, Dr. Price shaped ECHO's ministry and initiated the information-sharing, experimentation, training and networking that characterizes ECHO's global ministry.</p>
D	<p><u>Grafting*</u></p> <p>Grafting tropical fruit and nut trees is such a popular subject that every year ECHO has grafting workshops at all afternoon sessions. Topics: Each afternoon at the first session the teaching team will determine the interests and experience level of each delegate, then tailor-make the personalized instruction. The first session is usually instruction and observation. Second session delegates who attended any first session will have opportunity to practice grafting techniques they have learned.</p>	<p><u>Crafton Clift, David and Jenny Burd, Lloyd Marsh</u></p> <p>Crafton Clift is an expert with incredible experience grafting tropical fruits of many kinds. He has traveled to many countries on fruit-tree collection expeditions. David and Jenny Burd are local instructors who operate a small tropical fruit nursery. Lloyd Marsh owns a local citrus nursery and will be teaching citrus budding.</p>
F	<p><u>Fuel Efficient Stoves</u></p> <p>Health issues from smoke inhalation and chronic shortage of firewood can be improved by addressing stove design and use. The workshop will include information on causes and solutions of inefficient cooking practices, and principles for designing efficient cook stoves to suit different needs. We will also explore the different types of stoves, and their uses. There will be several stoves in use during the workshop.</p>	<p><u>Beth Doerr</u> is a former intern who returned to ECHO in 2004 after working for 13 years in agriculture and community development throughout the tropics. She currently serves as the Intern Manager and is responsible for the animals, and directing the appropriate technology department at ECHO.</p>

*Indicates the workshop is repeated

THURSDAY EVENING SESSIONS

6:30 p.m.	Banquet	Crowne Plaza
6:35 p.m.	Welcome & Prayer	
6:35-8:00 p.m.	Dinner	
7:30-8:00 p.m.	Banquet Speaker	
8:00-8:15 p.m.	Drawing	
8:15—8:25 p.m.	Closing Worship	
8:25—8:45 p.m.	Closing Prayer of the Nations	

ECHOcommunity.org

At the Southeast Asia Conference in October 2011, ECHO launched the new ECHOcommunity.org website and internet portal for our network members. As of September 30th 17,136 individuals or organizations have visited the site. They have viewed 234,596 pages, with an average of 6.90 pages per visit. These visitors represent over 169 different countries, and over 60 different languages. We now have over 3,543 active members, with 1,262 of them having joined ECHO since the website was launched in October 2011.

Our goal is for ECHOcommunity.org to be much more than just a repository of information; we want it to be a networking tool. The following features have become very popular in the ECHOcommunity.

ECHO Courses and Conferences are posted on the Event Calendar. Registrations for the ECHO Courses are accepted through this site and links are provided for registrations for ECHO Conferences.

Documents are searchable and available for free download, including ECHO Technical Notes, *ECHO Development Notes*, *ECHO Asia Notes*, and many others. The new *Ag Options for the Poor* book is the exception, but it is linked to our ECHO Bookstore and can be purchased from there.

Groups are available. Join groups organized by geographical area, popular plants or agriculture techniques. The groups include forums and blogs where you can browse information submitted by others, or start a new thread with a question for others to respond to.

Information regarding our research projects is posted on the site; you also have the opportunity to contribute information about your projects.

Seed information. Detailed plant and seed information is available to assist you in determining what you should plant, and how. We encourage you to submit your seed trial report to the ECHO Seed Bank through the form on this site. This will enable us to better understand which crops grow best under various conditions.

Request Trial Seed packets from our online store (this feature is for Active Development Workers only).

EDN Articles Forum. Let us know what you would like to see discussed in upcoming issues of EDN, and submit potential articles.

Contact Us. The “contact us” link allows you to send a request for information directly to the Technical Response Unit.

The screenshot shows the ECHO Community website interface. At the top, there is a search bar and a language selection dropdown. The main navigation menu includes links for Home, Asia Impact Center, East Africa Center, West Africa, Publications, Presentations, Groups, Research, Seeds, Career Center, EDN Articles Forum, and Links. The central banner promotes the 2013 ECHO Agricultural Conference, with the text 'Please take a moment to review ECHO's services and provide feedback on how we have affected you!'. Below the banner, there is a registration call-to-action for the 2012 ECHO Agricultural Conference (December 4-6, 2012). The right sidebar contains a 'SIGN IN' section with fields for Username and Password, and a 'CALENDAR' section listing various events and conferences.

POST CONFERENCE WORKSHOP AND STUDY OPPORTUNITIES

POST CONFERENCE WORKSHOP

(10:00 a.m. - 4:00 p.m.)

Registration and payment can be made at the bookstore. Fee \$50

Biochar, Biogas & Biosand Filters

Beth Doerr & Craig Bielema

Learn how biodegradable materials and biological microorganisms can be utilized to improve soil, indoor cooking, and drinking water. Make a batch of Biochar and learn how charcoal can be sustainable and improve poor soils, as well as provide clean drinking water and cooking fuel. Then, mix up a batch of manure slurry and load a Biogas digester, and learn how to use, maintain, and troubleshoot your biogas system. And finally, assemble a Biosand filter and get a better understanding of what is actually happening in your water filter.

Beth Doerr is a former intern who returned to ECHO in 2004 after working for 13 years in agriculture and community development throughout the tropics. She currently serves as the Intern Manager and is responsible for the animals, and directing the appropriate technology department at ECHO.

Craig Bielema completed a degree in Mechanical Engineering from Dordt College in 2007. From 2007-2011 he was a U.S. government employee, working as a test engineer. For 10 years he worked on a farm near his home in Illinois during the summers and winters. He came to ECHO as the Appropriate Technology Intern in 2011 and now serves as the Appropriate Technology Specialist.

POST CONFERENCE STUDY

FRIDAY & SATURDAY

Registration and payment can be made at the bookstore. Fee \$25/\$40

LIBRARY HOURS FOR STUDY

FRIDAY:

- 8:00 a.m. Library opens
- 8:30 a.m. Bus leaves hotel for ECHO
- 12:00 (noon) Lunch will be provided at the pavilion
- 5:00 p.m. Library closes

SATURDAY:

- 8:00 a.m. Library opens
- 8:30 a.m. Van leaves hotel for ECHO
- 12:00 (noon) Transportation will be provided for those who need to go and purchase their lunch. There are a few places within walking distance of ECHO.
- 5:00 p.m. Library closes
A van will leave ECHO to return to the hotel if needed.

LIBRARY INFORMATION

ECHO's library located in the technical building across the pond from the bookstore/office, contains a unique collection of books, periodicals, subject files, individual plant files, CD-ROMs, audio and video tapes devoted to international agriculture. There are also computers with internet access and a telephone (for use with a calling card only). WiFi is available inside the library and on the porch.

If you have a special research need and would like the Librarian to gather useful resources on that topic, please speak to Marilyn Acton at any time.

Conference Library Schedule

Tuesday	1:30 p.m.—5:00 p.m.	
Wednesday	1:30 p.m.—5:00 p.m.	
Thursday	1:30 p.m.—5:00 p.m.	
Friday*	8:00 a.m.—12:00 (noon)	1:00 p.m.—5:00 p.m.
Saturday*	8:00 a.m.—12:00 (noon)	1:00 p.m.—5:00 p.m.

*Post Conference Arrangements Required

Please abide by the following requests so we may efficiently serve your needs and those of your fellow delegates.

LIBRARY BOOKS AND RESOURCES DO NOT LEAVE THE ECHO LIBRARY.

Please return items to the book cart for re-shelving.

When using a subject or plant file folder, take the whole folder with you to a table in the study area. Do not mix the contents of different folders.

Please consume your food and drink outside on the porches before entering the library.

A library volunteer can assist you in making photocopies. Copies cost 5 cents per side. Make a note on your copy giving credit to the author and the source of the information.

Computers may be used to check e-mail but limit your replies to brief notes. Many delegates will want to use the computers for this purpose as well as for performing research searches.

If you have your own laptop with wireless capability, feel free to use the library and porch area to access the internet through our wireless router. A password is not needed.

BOOK REVIEWS

Agricultural Options for the Poor

by Tim Motis and Dawn Berkelaar

Agricultural Options for the Poor is for those looking for ways to improve the livelihoods of smallholder farmers and urban gardeners. The information is especially relevant to the tropics and subtropics, home to most of the world's poor. As a sequel to *Amaranth to Zai Holes*, this book compiles the best ideas in 100 issues of a quarterly technical bulletin, *ECHO Development Notes*.

Agricultural Options for the Poor is filled with practical options for those working to assist smallholder farmers and urban gardeners in the tropics and subtropics, many of whom struggle to produce enough food to feed their families. How can we help the farmer who must survive on a small parcel of degraded land without water or a means to purchase fertilizer? Information is abundant, but how does one sort through it all to find out what interventions will really make a difference? This is where perspective is so important, and the best way to gain it is to connect with like-minded people who have the benefit of experience.

Foundational concepts, such as the weaving of agriculture and community development, are covered in the first chapter. This chapter contains insights on research to be undertaken, as well as factors and issues to consider, before investing valuable resources in specific project interventions. Chapters 2 through 8 build on that perspective, covering practical, project-oriented options grouped under topics that include the restoration of unproductive soils, coping with scarce rainfall and crop pests, underutilized crops for human nutrition, diversification of small farms, seed multiplication and storage, and agriculture-related human health issues.

Agrodok Series

Booklets published by Agromisa & reviewed by Daniel Sonke

No. 15 Small-scale freshwater fish farming

No. 21 On-farm fish culture

This is a popular series about small-scale and sustainable tropical agriculture. The 30- to 80-page booklets each offer a concise packet of information on a specific topic. Among the 27 titles in this series are: Preparation and Use of Compost, Erosion Control in the Tropics, Fruit Growing in the Tropics, Vegetable Garden in the Tropics, Agroforestry, Hatching Eggs by Hens or in an Incubator, Preservation of Foods, Storage of Tropical Agricultural Products, Small-scale Production of Weaning Foods, and more. The latest title is On-farm Fish Culture. All titles are available in English and French; some are available in Spanish and Portuguese.

Series on Veterinary Care

Raising Healthy [Animals] Under Primitive Conditions.

These booklets provide a lot of information! Each booklet (80-180 pages) summarizes basic care of an animal, with housing and equipment, flock/herd management and nutrition, and disease and parasite prevention and control. The books are like readable summaries of a textbook on each animal. Nutrient components of various tropical feeds is particularly interesting. Medicines and dosages for common illnesses are also listed, for those with access to commercial treatments.

The booklets are written by veterinarians with Christian Veterinary Mission. Titles in the series include Pigs, Rabbits, Fish, Goats, Beef Cattle, Poultry (also in Spanish: Aves de Corral), and Dairy Cattle.

BOOK REVIEWS

Where There is No Animal Doctor

by Peter Quesenberry & Maureen Birmingham

This book teaches healthy animal care together with clinical care for diseases and otherwise anomalies in livestock. Focusing on the use of local resources, it teaches safe and effective methods for preventing and treating diseases as well as the use of medicines that may be available locally.

When Helping Hurts

By Brian Fikkert and Steve Corbett

Churches and individual Christians typically have faulty assumptions about the causes of poverty, resulting in strategies that do considerable harm to poor people as well as to themselves. *When Helping Hurts* begins by establishing a solid biblical foundation for understanding the nature of poverty and its alleviation. Building on this, the book then outlines several general principles for all poverty alleviation effort, including: the importance of distinguishing between relief, rehabilitation and development; the difference between asset-based and needs-based strategies; and the advantages of participatory over blueprint approaches. These general approaches are then applied to short-term missions efforts and to various economic development strategies appropriate for North American and international contexts, including jobs training, financial literacy, individual development accounts and microenterprise development.

The Ten Seed Technique

By Dr. Ravi Jayakaran

The Ten Seed Technique (TST) is a modified Participatory Learning and Action (PLA) tool and was introduced, after a lot of modification and experimentation, as a tool that can be used to carry-out several of the PLA exercises. It is useful in gathering qualitative information on various issues, especially related to the perceptions of the community and the way people see themselves in relation to others. The technique is very flexible and therefore versatile, enabling its use in combination with other techniques and also for collecting a wide range of information.

TST relies on using the Right brain function so that the full potential of the brain for perceptive analysis is utilized. The right brain is initiated into action by visuals such as pictures and three-dimensional items. The visual created by using seeds (with a strong contrast of colors between the seeds and background) helps the Right brain play a dominant role in the analysis. This enables probing deeply into different dimensions of an issue.

African Friends and Money Matters

by David Maranz

reviewed by Ruth Poglitsch, Swaziland

Westerners working in Africa are often directly responsible for overseeing the use and care of relatively large sums of money and physical resources. This leads to direct and continuing confrontations between African and Western ways of handling these things. In his book, David Maranz shares 90 observations about African economic and social systems. These observations address 95% of the issues that drive Westerners working in Africa crazy. It charitably explains the African point of view and how it differs from the Western perspective. Not all observations will apply in all locations, but this book is a great discussion starter with your African friends, co-workers, and employees.

Lost Crops of Africa Series

by the National Academy of Sciences

The series is "intended as a tool for economic development" among those who may promote these crops for local cultivation, develop markets for the grains, and explore the multiple uses of these species. The species discussed in this series were selected from nominations by people around the world. The information given about the crops helps readers to understand and appreciate the unique value of each plant and evaluate its potential for a given area. There are also very insightful appendixes on "potential breakthroughs" in some of the most pressing problems for development workers, including grain handling and child nutrition.

BOOK REVIEWS

Edible Leaves of the Tropics

by Franklin W. Martin and Ruth M. Ruberté

Discusses the value of leaves in the diet and describes hundreds of edible leaves. Green leafy vegetables, common weeds, tropical trees, spices and teas, and temperate vegetables in the tropics are included. There is some information on toxic leaves and the culture of green-leaved vegetables. This book has been out of print since the early 1980s, but has been reprinted by ECHO.

Growing Vegetables in Fiji

ECHO receives letters every month from individuals who did not grow up in the tropics, but who now find themselves called upon to do vegetable gardening under tropical conditions. Some have not had previous gardening experience in any climate. Now they may even be expected to teach the subject. Kirk Dahlgren authored this helpful, concise book while working as a Peace Corps director in Fiji. He discusses both tropical vegetables and techniques for growing temperate vegetables for which there may be considerable demand (and potential profit) in the tropics. We found it so useful both in teaching basic gardening techniques and in bridging the gap between temperate experience and tropical realities that we reprinted it.

Foundations For Farming / Farming God's Way

Manual and Training Materials

ECHO has been a strong proponent for FFF/FGW. Farming God's Way is an amazing Godly solution to the food security and poverty crisis for the rural poor. Farming God's Way is not just a technology but a well balanced biblical, management and technological solution for the agricultural domain, equipping the poor to come out of poverty with what God has put in their hands and revealing the fullness of His promised abundant life. FFF/FGW involves the training of the rural poor, equipping them to realize the God-given potential of the land. Agricultural skills are coupled with the Word of God in order to bring about a harvest in righteousness and faithful stewardship.

Fruits of Warm Climates

by Julia Morton

An authoritative source for information on sub/tropical fruits from around the world. Possibly our most-used reference book at ECHO, this 505-page book has comprehensive information, excellent photographs, and practical growing hints for over 150 well- and lesser-known fruits and related species. It offers regional names, complete information on varieties, food value and toxicities, propagation, harvesting and storage, and medicinal uses, etc. of the various fruits. It is an indispensable resource for anyone who works extensively with tropical fruit production. (from EDN 50)

Seed to Seed

by Suzanne Ashworth

A good seed saving reference is highly recommended for the rural development worker. All three of these books cover the basics of plant selection, pollination, harvesting, processing and storing seeds as well as information on individual plants.

Faith Garden Manual

An ECHO and ADLOF Publication

A training manual and guide to preparing and planting a family vegetable garden, this guide has been helpful for practitioners gardening at home, in hospitals and orphanages and in schools. It includes sections on IPM, Home Pesticides, Companion Planting and worm composting.

Where There Is No Doctor

An enduring classic covering basic health care for the average person in remote areas. We stock the standard, international, Spanish and African Versions.

BOOK REVIEWS

Let's Restore Our Land

Edited by Daniel E. Fountain, MD

Written in a conversational style, this book brings up issues as a community leader might—through dialogue and personal interactions. It tells the story of a community that came to realize that their soil was becoming weak, and the forests that provide many resources were disappearing. They recognized that God had given them the responsibility to care for and protect these natural resources that he has created and allows us to use. Under the leadership of Pastor Simon, the people in the community of Katindi made changes that increased the fertility and production of their soil and began restoring the trees and forest that had almost disappeared. The increased prosperity of the people of Katindi encouraged people in other communities to make similar changes. Restoring their land and forests improved their lives and their nutrition. The book enables people to discuss and understand problems of the land and forests. It encourages them to consider how God would want them to respond, and it helps them determine solutions for these problems and how to put these solutions into practice. The resulting development is community-based and shows people how to use resources available to everyone.

Food from Dryland Gardens

by David Cleveland and Daniela Soleri

Published by ECHO & Reviewed by Martin Price, PhD

Please note: This book is no longer in print. ECHO has CDs only.

The authors combine hands-on style with top academic training. Dr. Cleveland did his Ph. D. studies with small-scale farmers in NE Ghana and Dr. Soleri with maize farmers in Mexico. Both are co-directors of the Center for People, Food and the Environment and teach at the University of California in Santa Barbara. They have lots of hands-on gardening experience in Arizona and New Mexico where they worked with Hopi and Zuni Indian tribes.

This large, 386-page book is filled with helpful illustrations. Surprisingly, there do not seem to be many books of a practical nature written on this important topic. It was written for field workers, extension agents, students, project workers, program planners and, of course, gardeners. The authors write from personal experience working in dryland Africa and in the North American Southwest. It is both a beginner's guide and a reference for those with more experience. It helps the reader learn to observe and work with local people and to ask appropriate questions about the community, the environment, and the potential for gardens to improve nutritional, economic and social well-being. The Food from Dryland Gardens CD-Rom can be purchased from ECHO.

ITDG Food Cycle Technology Source Books

A "UNIFEM (United Nations Development Fund for Women) series which aims to increase awareness of the range of technological options and sources of expertise as well as indicating the complex nature of designing and successfully implementing technology development and dissemination programmes." These are single subject books about various Appropriate Technology subjects.

Tropical Agriculturalist Series

From CTA and Macmillan publishers: "A comprehensive series of practical field guides and textbooks on many aspects of agricultural production in the tropics covering both crops and livestock." Each small book, generally between 100 and 150 pages, covers a single crop, animal or system in depth.

Kingdom Development

by Jeff Palmer of the Asian Rural Life Development Foundation

An introduction to community development from a Christian perspective. It is based on the author's years of experience as an agriculturalist and community development worker in the Philippines. In less than 100 pages the author zeros in on key concepts for living and working in a community.

MEALS PROVIDED BY:

Buckingham Presbyterian Church

Chapel by the Sea

Christ Community Church

Lee County Homeschoolers

New Hope Presbyterian Church

Northside Baptist Church

St. Hilary's Episcopal Church

St. Luke's Episcopal Church

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TRAINING OPPORTUNITIES AT ECHO

Internship in Tropical Agriculture

Interns work along side ECHO in its ministry while experiencing an astounding array of tropical plants, techniques, and appropriate technologies that have potential to make an impact on the world. Interaction with network members gives a rich and realistic view of missions and development work. Each intern has responsibility for an area of the Global Farm in addition to either the seedbank or fruit tree nursery. ECHO's experienced staff provides mentorship, training, and encouragement. Positions begin in January, April, July, and October, and candidates should apply 6-12 months before the position they are interested in. Interns receive a stipend, housing and health insurance. For more information, see www.echonet.org or contact the Manager of the Intern Program, Beth Doerr (bdoerr@echonet.org).

Study Program

ECHO welcomes visitors to work and study with us. These "students" are given the opportunity to craft their own program of study including hands-on experience on the farm, resources in our library, and interaction with ECHO staff. Many participants are already doing development work overseas and research topics of concern related to their own work. Others may want to explore the possibility of Third World agricultural development as a career opportunity, and college credit could be arranged on an individual basis. The dates for the program are flexible. Fill out an application at www.echonet.org or contact our Education Coordinator, Karyn Traum (ktraum@echonet.org) for more details.

Missionary in Residence Program

Candidates should have a strong interest in increasing their skills and knowledge in tropical agriculture while contributing to the ministry of ECHO through consulting, teaching, writing, or other areas determined on an individual basis. Most MIR's stay between 1 - 6 months and are expected to contribute to their housing and utility costs. The dates for the program are flexible. For more detailed information and an application please contact Tim Albright (talbright@echonet.org).