THE TRUE COST OF FOOD GUIDE FOR DISCUSSION LEADERS

The Sierra Club Sustainable Consumption Committee Mission: To encourage people to think about the environmental impacts of their consumption choices by providing specific information.

This campaign and this guide seek to provoke thought and discussion about the effects of our food choices. We are not attempting to cover the topic comprehensively or to prescribe Sierra Club policy, rather we seek to promote more informed choices about how the way we eat affects our planet and our quality of life. This is a relatively new campaign and the discussion guide is a work-in-progress. Your suggestions for improving it are welcome. We would also like to hear from you on how you use the video and guide*.

SOME SOLUTIONS

•Eat more vegetables, fruit, and grains and less meat. Look for meat that is produced in the least harmful way—grass fed, organic, antibiotic- and hormone-free.

•Buy organic whenever you can.

•Buy from small, local sources whenever you can.

THE TRUE COST OF FOOD campaign is spreading the word about hidden costs in mass-produced food and about alternatives that are kinder to the planet and better for us. Discussions leaders—you!—are an integral part of this campaign.

You might already know a lot about the true cost of food. We're trying to reach people who don't, as well as energize the people who do. This campaign will be successful only if it spreads, if each meeting leads to more meetings, if you pass this material to someone who will become the next discussion leader. The environmental problems caused by our eating habits can be solved—but only if a great number of consumers make an effort to solve them. Knowledge is power!

SEE THE VIDEO AND TALK ABOUT IT Food issues are not simple. To bring some lightness to this heavy message, we've created an attention-getting animated video that can be used to introduce the topic for discussion. We're promoting discussions rather than lectures to permit the audience to add their own expertise, ask questions, and develop projects that will become part of the solution. Thank you for offering to lead one of these discussions.

TOOLS YOU CAN USE This guide will provide you with tools to help you lead the discussion. We've gathered background information about issues raised in the video, suggested discussion topics and group projects, and prepared answers to some of the most frequently asked questions. We've also included additional sources for information. We assume that you will focus on the areas in which you and your audience are most involved. We are also providing you with tips on how to recruit viewers and how to run a meeting (see page 8 of this guide or www.truecostoffood.org), so that even if you've never done anything like this before, you can do it successfully now. Questions? E-mail us at Truecostoffood@aol.com.

THE PROBLEMS WE'RE FACING

Food consumption is an area where individual decisions can make a difference; supply will follow demand and it's already happening. But first we need to look at the current landscape:

•The way food is produced and the way we eat create huge costs that are not reflected in our food bills. Some are actual dollar amounts (subsidies and cleanup costs that we pay for in taxes); some are damage to the environment (pollution and loss of wildlife habitat); some are loss of quality of life (tasteless food, loss of the pleasure of preparing food and eating together); and some are health issues (obesity, diseases, poor nutrition, contaminated food).

•Agribusiness farms employ chemical-intensive systems that pollute land, air, and water.

•We transport much of our food from centralized factory farms—instead of buying it from local sources—which is a poor use of resources and a contributor to air and water pollution.

• We're losing our wild places because of wasteful agricultural practices such as uncontrolled grazing and fattening up animals with diets of factory-farm corn.

• Americans get much of their meat from pollution-causing factory farms and feedlots.

•More and more of our food production is controlled by a few large producers. Buying from small, independent producers allows us some input into how our food is grown.

DEFINING SUSTAINABILITY

"Sustainability means living in such a way that there are enough resources to live well, in an alive, thriving environment—indefinitely." Jon Jeavons, author of How to Grow More Vegetables. . .

A sustainable system is one that can be maintained with minimal use of scarce resources from outside the system; with minimal negative impact on the planet; and with maximum benefit for the producer.

WHAT'S INSIDE

VISIT OUR WEBSITE: www.truecostoffood.org
Contact us: *truecostoffood@aol.com

SUSTAINABLY RAISED, ORGANIC AND LOCAL FOOD

Discussion: What's the difference between them? Is one more important than the other?

Background: defining "organic" Organic food is grown without pesticides, synthetic fertilizers, or other chemicals. For more info, see page 3 or **www.organiccon-sumers.org** or **www.ams.usda.gov/nop/indexIE.htm**.

Until recently, the use of the term "organic" was not regulated; any farmer could use the term. In the past five years, the U.S. Department of Agriculture (USDA) has created a set of organic standards, and only farmers who are certified by an outside agency as strictly following these rules can label their food "organic."

Farms that rely on the use of chemicals cannot be sustainable because they require ever-increasing quantities of chemicals. Scarce natural resources are used to create these chemicals, and runoff from conventional agriculture pollutes the environment. Organic farmers and gardeners enrich their soil with natural ingredients.

Background: defining "local" Some food activists advocate looking for food that's grown as close to you as possible. For some people, that means living off the backyard garden, for others it means buying as much food as possible from sources within 50, 100, or 200 miles from home.

Buying food that's grown locally avoids shipping it and the pollution that transportation causes. It often allows you to get your food fresher, so it tastes better and is more nutritious and appealing. Food starts to deteriorate as soon as it is picked; food that is shipped across the country can spend a week in a refrigerated truck.

Another reason for supporting local farms is that they are usually smaller and more independent; there are lots of them, as opposed to just a few agribusiness giants. Keeping many small farms in business means that food decisions won't be concentrated in a few hands. Right now, 72% of our food comes from seven percent of our farms, and if that trend continues, there won't be many small farms left. If the big farms decide to follow practices that we don't approve of, we won't have anyplace else to go for food.

Which is better, organic or local? Recently some of the biggest food companies have realized that the market for organic food is large and growing larger and they have started growing food that meets organic standards. A lot of this agribusiness-organic food is grown on huge farms and shipped around the world. Some food activists make a logical argument that it's better to eat agribusiness-organic food than non-organic food. These large companies use modern and efficient business practices to bring good food to the largest number of people possible all through the year. Some are dedicated environmentalists as well as competent and successful business people and they are very good at growing and distributing organic and other responsibly-grown food. On the other hand, these farms don't provide the benefits of local food, savings on transportation, increased nutrition, and maintenance of small farms.

But some small local farms can't afford the costs or time involved in getting certified, even though their practices are just as safe as certified organic farms. In fact, some large-scale organic farms use questionable practices that are allowed under USDA organic standards (such as overuse of approved botanical bug-killers); smaller farmers are often more careful (see. **www.naturallygrown.org/).** But it's hard to be sure if uncertified local farms are not using chemicals.

The choice becomes easier if you know the farmer who is growing your food. Whether or not a local farm is certified organic, if you can look the farmer in the eye and talk to him or her about their growing practices, you can be more comfortable with the choice you make. It might take a bit of time to find a local farm, but there are many sources of information (**www.localharvest.org** or **www.sustainabletable.org** for info about farmers' markets and stands; **www.csacenter.org** for Community Supported Agriculture (CSA), co-ops that buy from local farms).

In some communities, it's easy to find food that is both organic and locally grown; in others, you're lucky to get either. But it's not hard to find out how your food is being raised. A little web research or a call to an 800-number listed on a package will usually get you the information you need.

MORE DISCUSSION TOPICS

- Discuss experiences finding organic and/or local food.
- What's more important, organic or local?
- What criteria should be used when assembling a list of sustainable growers?
- Has anyone in the group had personal experience with problems caused by agricultural chemicals? Or know of environmental damage that local agriculture has caused?
- Is there enough evidence that conventional growing practices cause environmental and health problems? How can more evidence be assembled?
- Can anyone in the audience talk about gardening organically?

GROUP PROJECTS

- Make a list of local sources for local and organic food.
- Start a campaign to talk to officials in local schools about using local and/or organic produce in some or all of their meals. See **www.foodstudios.org** and **www.choice.usd.net**.
- Start a campaign to talk to managers in local stores and restaurants; see sample letters (www.truecostoffood.org)
- Find out if there are safeguards in effect to prevent agricultural runoff, or to promote chemical-free or less-damaging farming practices in your community/state.
- Start a community or school organic garden to learn first-hand about how to garden without chemicals.
- If there is no CSA or farmer's market in your area, start one.
- Learn which foods get the most pesticides and take special care with those **(see www.Foodnews.org/reportcard.php).**

PESTICIDES, FERTILIZERS, RUN-OFF

Discussion: How do agricultural chemicals affect us? Are they really so bad for us?

Background: For thousands of years, farmers have depended on a variety of methods to control pests and enrich soil. Then, in 1939, a Swiss chemist discovered a compound called DDT that was extremely effective at killing pests that attacked most crops (as well as lice). For the first few years, crop loss decreased. Then resistant strains of the pests began to appear; more toxic pesticides and higher dosages were required to control these new breeds of pests. We're now using 42 times more pesticide than used in 1942, and the ones we are using are about 10 times as toxic—yet the crop loss is greater than it was before we started using them at all.

The use of synthetic fertilizers dates back to 1842, when they were created by adding acid to ground bones. Plants need nutrients—especially nitrogen, phosphorus, and potassium—and pull them from the soil where they are grown. Farmers have always added fertilizer to their soil, but they used naturally occurring substances, compost made from decomposing organic matter, cover crops, and crop rotation to build their soil. These fertilizers are released slowly in the soil. Synthetic fertilizers, which are made by altering the chemical composition of a substance, usually through the addition of acid, work much more quickly, which can cause problems: it is easy to over-apply them, and they easily leach out of the soil.

When rainwater or snowmelt soaks a field treated with chemicals, the chemicals may be flushed into streams and rivers, or else percolate through the soil and enter the groundwater; the result is a build-up of chemicals, especially nitrates, in our waterways. Agricultural runoff is the nation's leading cause of water pollution and is a major contributor to the over-enrichment of our coastal waters, creating environmentally disastrous dead zones in the Gulf of Mexico and elsewhere.

These chemicals—in our water, our soil and our food—are dangerous to our health (see **www.nrdc.org/health/pesticides/default.asp** and **www.beyondpesticides.org/infoservices/pesticidesandyou/index.htm.**

Excess nitrates causes birth defects and problems in infant development. Exposure to pesticides has been proven to cause increased cancer rates in people who work or live in agricultural areas, especially children. Definitive studies have not been made to show all the health effects of these chemicals. But it is important to remember that one characteristic of these chemicals is that they are extremely persistent; if and when it is proven that they do affect our health,we will not be able to get rid of them.

It has been proven that organically grown food has substantially less chemical residue. (See **www.newfarm.org/depts/gleanings/0504/pesticide.shtml).**

CAN WE GROW ENOUGH FOOD WITHOUT CHEMICALS?

Some people wonder if we can grow enough food to feed ourselves without using pesticides and other chemicals. Yes, we can. Recent studies have found that organic farmers can keep their yields and profits in line with conventional farming if they maintain a careful soil and pest management program. A National Resources Defense Council {NRDC) study **(www.nrdc.org/health/farming/fields/chap2.asp)** found that in over 80% of the farms and commodities studied, costs decreased or remained the same and yields increased or remained the same when comparing organic to conventional production. And 100% of the organic farms reported an increase in net returns.

Some methods organic farmers use to maximize yield without resorting to chemicals include monitoring pests so that problems don't get out of hand; using plant-based pest controls and fertilizers, but only when necessary; enriching soil through cover crops and other methods; and rotating crops to avoid depleting the soil. (For more info on organic farming, see **www.ofrf.org/general/about_organic/index.html.)**

ENERGY AND WATER ISSUES

Small organic farms and sustainable farms often use water and fuel more efficiently than agribusiness. It requires a great deal of energy and fossil fuels to produce chemical fertilizers. Large farms often employ automatic irrigation systems that water even when unnecessary, a problem in drought areas.

"We have to be aware of whom we're buying our food from and how it's produced." Alice Waters

SUSTAINABILITY AND MEAT:
CAN WE HAVE BOTH?

Eating Less Meat

Discussion: Can we and should we reduce our consumption of conventionally-produced meat?

Background: In order to feed the world while conserving the Earth's increasingly scarce resources, we need to produce and consume food as efficiently as possible. No critical examination of how our food choices affect the planet would be complete without a discussion of the way we produce and consume meat and other animal-based products.

Most of the meat that Americans eat is grown on factory farms (also known as CAFOs, Confined Animal Feeding Operations)—four meat-packing plants control 79% of animal slaughter. The way that these corporations raise meat wreaks havoc on the world's air, land, water and energy.

Even when raised in the most sustainable way possible, meat usually requires a greater investment of resources than most plant-based food. Moreover, most medical authorities advise that eating too much meat is related to serious health problems. Cutting back on our consumption of meat—even sustainably raised meat—is a wise choice, especially since we have been eating much more than our bodies need.

"The factory meat industry has polluted thousands of miles of America's rivers, killed billions of fish, pushed tens of thousands of family farmers off their land, sickened and killed thousands of U.S. citizens, and treated millions of farm animals with unspeakable and unnecessary cruelty. "
Robert F. Kennedy, Jr. Waterkeeper Alliance

HARM FROM FACTORY FARMS:

• Factory-bred animals are fed a diet of concentrated corn and other grains. Eighty per cent or more of the grain grown in the U.S. is fed to cows—it takes 10 to 16 pounds of grain to produce a pound of meat. The cost of raising this grain is enormous, requiring a great amount of land, water and fertilizer. Animals can't digest this corn well; belching and farting cows are responsible for about 16% of methane, one of the greenhouse gases that are causing global warming.

• Grazing and growing feed for livestock is an inefficient use of our land. We can nourish ourselves more efficiently by eating the grain directly rather than feeding it to animals and then eating the animals. Grazing animals can be very destructive to the land if not carefully controlled. They eat everything in sight.

• Running factory farms and growing feed take enormous amounts of water and fossil fuels.

• Factory farms often allow their waste to pollute drinking water. Drinking water contaminated with animal waste causes health problems. Excess nitrates can cause birth defects, miscarriage and blue baby syndrome. Animals carry disease-causing pathogens in their waste; some of this waste is disposed of on land, where it runs into nearby streams or seeps into underground water supplies. The waste also includes hormones, antibiotics and pesticides.

•Some of the waste is stored in gigantic man-made "lagoons." In bad weather, the lagoons can break open, destroying rivers and natural areas. In North Carolina, 25 million gallons of hog feces spilled into the New River, killing 10 million fish and poisoning 360 wetland acres.

•To make the animals grow more quickly, they are pumped full of hormones. Animals are also regularly dosed with antibiotics to stimulate appetite and to reduce diseases that breed in their cramped, filthy environments.

•Workers in and residents around factory farms have higher rates of disease. The air near CAFOs is highly polluted.

•Animals in factory farms are treated terribly; the cruelty to these animals is enormous. Intensive confinement, mutilation (e.g. de-beaking of chickens), and unsanitary conditions are considered "common industry practices."

For more info: **www.factoryfarm.org** and **http://www.sierraclub.org/factoryfarms/rapsheets/**

MORE DISCUSSION TOPICS

•Is buying meat from small, grass-fed farms a practical and effective alternative to factory-farmed meat?

•How can we help small farms that raise meat sustainably grow and prosper?

•How can we reduce the amount of meat in our diets? Can anyone suggest recipes or cooking methods that use meat as part of a meal rather than as a main course.

•What are the advantages and challenges of a vegetarian or vegan lifestyle? Can anyone speak about his or her vegetarian or vegan experiences?

GROUP PROJECTS

•Find out where the meat you eat comes from.

•Investigate local sources of grass-fed meat. Visit farms, talk to farmers about how they raise their livestock.

•If there are no sources of local meat in your neighborhood, try to find a grass-fed farm within a few hours' drive and organize a buying club to bring its products to the members in the group. Or ask local store owners to carry these products.

•If there are factory farms in your area, call them to discuss how they protect the community from their waste.

•Find out more about becoming a vegetarian or vegan. Get some cookbooks, contact local vegetarian societies, surf the web, visit neighborhood natural food stores.

ALTERNATIVES TO FACTORY FARMED MEAT

There is a growing movement of small farms that have found methods to avoid much of the harm that factory farms and feedlots cause. These small farms raise many fewer animals (some raise only 2 to 12 animals), so there is no buildup of waste; manure is composted or allowed to decompose where it falls. Usually, these animals eat grass instead of grain, so huge amounts of fertilizer are not needed to grow feed for them. Many avoid using hormones and antibiotics entirely, or use them only when absolutely necessary. The animals are rotated carefully, so that fields are not overgrazed and destroyed. Animals digest grass more efficiently than they do corn, so they expel much less of the greenhouse gas methane. And the animals are raised under much more humane conditions. Grass-fed beef is lower in fat and contains a healthier ratio of fats (Omega3/Omega6) and other chemicals. Many people think grass-fed meats have a better taste and texture. For more information about sustainable farms that raise meat and dairy products, see **www.americangrassfed.org/**

A SUMMARY: Some people choose to eat grass-fed beef and free range chicken, others choose to be vegetarians, some may start buying regularly from a local farmers market, and or buying organic and still others may strive to increase the proportion of vegetables, fruit, seeds, nuts, and grain in their diets. All of these choices, and combinations thereof, help reduce the negative environmental impact of our diets.

SOME FAQs ABOUT MEAT

Can I get enough protein if I don't eat meat every day? Is meat an unhealthy food?

Protein is an important part of nutrition but it doesn't have to come from animal products. The World Health Organization recommends a diet of 8-10% protein. Most Americans eat about 30% protein. There is much evidence that too much protein can cause health problems. We can replace or supplement animal proteins with healthy nuts, beans and grains.

Red meat and dairy are the major sources of saturated fat. which has been connected to many serious health problems. Beans, grains, rice, fruit and vegetables have less saturated fat and more fiber.

Can we really get Mad Cow disease from our beef supply?

Although the thought of Creutzfeldt-Jakob Disease, which can be caught by eating meat from cows that had Mad Cow disease is frightening, the chance is very slim. In England, where the outbreak was considered severe, just over 100 people actually got the disease that way over a period of several years. And some practices—like feeding animal parts to cows and not segregating "downed" cows—have been outlawed. Mad Cow disease is not the best or the only reason to avoid factory-farm raised beef. But factory farm practices do create conditions where meat-borne diseases can spread. Animals are raised in very tight quarters, in large numbers, so diseases spread rapidly; and workers don't know each animal so they can't tell when one is sick (think about a family farm where only a dozen steer are raised—the farmer will immediately know if one of them is "not acting right"). Then, they're slaughtered en masse, so that meat from hundreds of animals is mixed into every lot—you might have meat from several hundred cows in one pound of hamburger, so meat from one sick cow will go to hundreds of people. For the USDA site on Mad Cow disease, see **www.fda.gov/oc/opacom/hottopics/bse.html**

Why are people worried about antibiotics in cows? Don't antibiotics kill germs? And what about hormones?

Yes, antibiotics do kill disease, but germs are tricky; they select for resistant strains, these resistant strains survive and multiply while non-resistant strains die so all you have left are the really dangerous ones. On factory farms, animals are so prone to disease that they're dosed with antibiotics—70% of all antibiotics used in this country go to animals. These antibiotics are excreted by animals and can end up in our streams, rivers and ground water. And when we eat the meat, we get those antibiotics.

Agribusiness uses hormones and antibiotics to stimulate appetite and make animals grow faster. But we end up with more hormones in our bodies, and they're not good for us. For more info about food additives, see **www.ucsaction.org/action/index.asp?step=2&item=11522**

MORE ISSUES AND FAQS

Is local or organic food more nutritious than conventional?
Growing food organically does not make it more nutritious; but farmers who grow organically often choose more nutritious varieties and harvest them at their peak, which does enhance nutrition.

Modern farming and food processing methods have made much of the food we eat less nutritious; we take in many more calories than we need and get much less benefit from them. Agribusiness grows fruits and vegetables in large centralized farms and ships them around the country and world, so they can be in transit for weeks. Vegetables start losing their nutritional value when picked, so by the time we eat agribusiness vegetables much of their nutritional value has been depleted. Local, seasonal food is fresher and therefore more nutritious. Some varieties of vegetables (greener greens, juicier tomatoes, more delicate carrots) have greater nutritional value than others but are more fragile and difficult to transport; they are therefore not grown by agribusiness. Food that has been processed often contains a lot of empty calories (sugars, fats and fillers), preservatives, and packaging— and little nutrition. USDA regulations require food manufacturers to list ingredients in order, with the greatest quantity listed first. Note how often various forms of sugar (corn syrup being the most popular) are major ingredients.

Why is organic food so expensive? And why is food at farmers' markets or farm stands more expensive than in the supermarket—shouldn't it be cheaper because there's no shipping or middlemen?
In most cases, sustainably-grown food does cost more on the checkout line than mass-produced food. Organic methods are more labor intensive than conventional, and thus more expensive in the short run. But in the long run, when hidden costs (such as taxes for subsidies and for building water filtration systems or health problems caused by poor nutrition) are considered, we're paying much less for it. And if we compare the prices of organic foods to processed foods, like sugared cereals and packaged meals, we're getting much more for our food dollars with organic vegetables.

As farmers become more experienced at sustainable growing and as they amortize the costs of equipment and land, prices could become lower. Two ways to get sustainably-grown food at lower prices: Join a CSA food co-op (**www.csacenter.org**) or grow it yourself!

I've heard that organic farmers use manure to fertilize their fields and that causes e. coli and other bacteria to form in food. Can organic food be worse for me than conventional?
Organic farmers never use manure that is not fully composted and free of bacteria; first of all, the certifying agents wouldn't allow it, and second, they would not become organic farmers in the first place if they were not interested in growing safe food—they and their children work in the fields! The composting process turns manure and other organic matter into a rich, nutrient-filled substance that's better for plants than any chemical fertilizer; all harmful bacteria are destroyed during this process. For more info, see:
www.vegsource.com/articles/organics.2020.htm

The story is different in third-world countries, many of which ship food to this country. There, farming is not regulated and the fields are usually worked by poorly paid workers. Check the country of origin for your food—buy American!

However, all food, organic or not, should be washed under running water before eating it. Birds, dogs, and wild animals often get into fields and runoff passes over them; bacteria from these sources can end up on any food.

I thought fish was healthier than meat. Now I hear that it's just as bad.
Yes, many types of fish are low in unhealthy fat and high in healthy Omega 3 fats. But over-fishing has caused seafood populations of some types of fish to become dangerously low; two-thirds of the world's fishing areas have "crashed." That means that all the fish are gone; there are simply not enough fish in the ocean to feed 6.3 billion humans on the typical Western diet. Large fish farms—another type of agribusiness—often fatten up their fish with unhealthy feed, some of which include PCBs, chemicals that have proven to be carcinogenic. These fish farms release a huge amount of pollution into our waterways and the farmed fish-which are often inferior types—escape and breed with wild varieties, weakening the species. Coal burning power plants release mercury that contaminates our lakes, rivers, streams and oceans. The fish that live in those waters in turn contain high levels of Mercury— high enough that eating the contaminated fish is considered dangerous for pregnant women, infants and children. There is some sustainably-caught or raised fish available; for more info check **www.blueocean.org/seafood/index.asp.**

What is COOL? And do we want it?
COOL (Country of Origin Labeling of fresh produce, peanuts, beef, pork, lamb, and farm-raised fish, would give consumers information about where agricultural products are grown. COOL became law with passage of the 2002 Farm Bill but as of January, 2005, it is still voluntary. If you want to know if your food was grown in the United States or abroad, or whether a package of hamburger—even one stamped with USDA approval—contains a meat from several different countries, write to your Congressperson and ask them to support mandatory implementation of COOL.

I keep hearing about GMOs (genetically modified organisms), GE (genetic engineering), biotechnology. Would the government allow them if they weren't safe? And anyway, hasn't plant breeding been done for centuries--why is it suddenly a problem?
Scientists at a few chemical companies have found a way to fiddle with the genetic structure of certain plants and have combined plants to give them more disease resistance, rapid growth, or other desirable factors. Some scientists think this is progress, but many believe that there are risks involved. See **www.ucsusa.org/food_and_environment/biotechnology/page.cfm?pageID=346** for a thorough discussion.

Also, almost 100% of this "new food" is owned by five companies (Monsanto is the leader)—and they are aggressively protecting their patents. Their seeds easily cross-breed with others, and current law gives them rights to keep farmers from replanting seeds without re-buying them from the company. So if GMO food takes hold, five companies will control our seed supply. The Future of Food, a documentary, covers the topic. **(www.organicconsumers.org/biod/film091004.cfm).**

SOURCES OF INFO IN VIDEO

•*A gallon of oil per pound of beef*
SOURCE: The Oil We Eat, Harper's Magazine, 2/2004, pp.37-45.

•*Twenty-five hundred gallons of water for each pound of steak.*
SOURCE: Ecological Integrity: Integrating Environment, Conservation andHealth (Island Press, Washington DC, 2001), David Pimentel

• *For every 10 pounds of healthy grain you put into a cow, you only get out one pound of meat.*
SOURCE: The U.S. Council for Agricultural Science and Technology (1999 Report: Contribution of Animal Agriculture to Meeting Global Human Food Demand)

• *Worldwide, we chop down an acre of rainforest every minute, and lose millions of grasslands acres a year, to feed and graze cattle.*
SOURCE: Rain.org/info_center/factsheets/04B/html. Also, World Bank Report 2324, Livestock Revolution. 12/01.

• *Cows crap about 65 pounds a day -- that's 12 tons a year.*
SOURCE: From US Dept. Of Agriculture- Natural Resources Conservation Service http://www.nrcs.usda.gov/technical/ECS/nutrient/animalmanure.html (Note: this source lists manure production of a 1,000 lb. beef cow at 59+ lbs; for dairy cow at 80 lbs. Most beef cows, when ready for slaughter, weigh considerably more than 1,000 lbs; so 65 lbs is a good working estimate.

• *Factory farm runoff has poisoned the ground water in 17 states and has polluted 35,000 miles of America's rivers.*
SOURCE: Iowa Sierra Club publication: http://iowa.sierraclub.org/Sierran-Article-2.htm (Pollution from Animal Factories: The Cafo Record the Cafo Threat).

• *16% of the greenhouse gas methane comes from animals.*
SOURCE: Worldwatch Paper 103, Alan and Holly Brougher. Taking Stock: Animal Farming and the Environment.

• *Monocroppers douse r fields with one billion pounds of toxic pesticides a year.*
SOURCE: EPA:
http://www.epa.gov/oppbead1/pestsales/97pestsales/highlights1997.html

• *Short-sighted practices make the earth lose 24 billion tons of topsoil a year.*
SOURCE: The National Trust, UK, Policy Statement:
www.nationaltrust.org.uk/main/ policy/documents/Soil.pdf

• *Agricultural runoff is the #1 pollutant of U.S. rivers, killing entire ecosystems and poisoning our groundwater. The EPA says we could save $15 billion worth of water treatment plants if we cut agricultural toxins.*
SOURCES: Prairie River Network, Illinois
http://www.prairierivers.org/Projects/Runoff/
And EPA Fact Sheet: http://www.epa.gov/owow/nps/facts/point1.htm
And: http://www.worldwatch.org/press/news/2000/12/09/

• *You need more and more chemicals all the time, to get the same results*
SOURCE: Source: Worldwatch Paper 153: Why Poison Ourselves, A Precautionary Approach to Chemicals, p. 29. (This paper mentions 2.5 billion pounds of pesticide, but that's worldwide.)

• *Monocroppers get huge federal subsidies, no matter how much they produce — a total of $14 billion a year.*
SOURCE: Environmental Working Group:
http://www.ewg.org/farm/findings.php

• *In 2002, the largest 10 percent of farms collected 65 percent of the subsidies; the bottom half got 2 percent — a paltry 256 bucks a year.*
SOURCE: Environmental Working Group:
http://www.ewg.org/farm/findings.php
And: http://www.ewg.org/farm/help/faq.php#eirap3

• *7 percent of our farms sell 72 percent of our food.*
SOURCE: http://www.inmotionmagazine.com/bcbrasil.html

• *The average American meal travels 2000 miles from farm to table.*
SOURCE: Worldwatch Paper #163: Home Grown: The Case For Local Food In A Global Market, Brian Halweil, November 2002
More stats from the press release page
http://www.worldwatch.org/press/news/2002/11/21/

• *15 percent of American kids are overweight —triple the proportion in 1980.*
SOURCE:Worldwatch Paper #150: Underfed and Overfed: The Global Epidemic of Malnutrition, by Gary Gardner and Brian Halweil

• *30 percent of American adults are overweight.*
SOURCE: National Health and Nutrition Examination Survey 1999–2000
http://www.cdc.gov/nccdphp/dnpa/obesity/faq.htm#adults

• *Rising cancer rates, especially in children and especially around heavy agricultural areas, show that those toxic pesticides aren't just killing bugs and soil; they're killing people.*
SOURCE: National Resources Defense Council
http://www.nrdc.org/health/kids/nfarm.asp

• *Eating local saves up to 17 times the gas costs of food you buy in the supermarket.*
SOURCE: http://www.worldwatch.org/press/news/2002/11/21/

• *The organic food market is growing at 25 percent a year.*
SOURCE: Worldwatch Paper 153, Why Poison Ourselves, p. 41

SOME SOURCES FOR GENERAL INFO:
Center for Science in the Public Interest
www.cspinet.org/
Global Resource Action Center for the Environment (GRACE)
www.Sustainabletable.org
Organic Consumers Union
www.organicconsumersunion.org
United States Department of Agriculture
www.USDA.org; www.ams.usda.gov/nop/indexIE.htm
Robin van En Community Supported Agriculture Center
www.csacenter.org
Local Harvest (listing of farmers' markets)
www.localharvest.org
Organic Farming Research Foundation (Santa Cruz)
www.ofrf.org
EarthSave International
www.vegpledge.com

TIPS ON ORGANIZING A MEETING

Planning and Recruiting

•A meeting of five or ten people can be just as effective as a meeting with a crowd. Set a goal you can handle. If you're a member of A group that meets regularly (PTA, religious or community organization, or town board), ask if you can hold a special meeting for this topic. Think about showing it at book groups, family reunions, or dinner parties.

•Meetings can take place at your monthly Sierra Club gathering or outside the SC format in any place from a community room to someone's home.

•Studies and experience show that the most effective way to get people to attend an event is to ask them personally. How you invite someone to an event can be just as important, or more, than what you are inviting them to. Multiple contacts increase turnout to events, so use them all: phone, letter, postcard, notice in newsletter and e-mail alert. But remember: best is a personal invitation. It is recommended you call until you actually talk to the person and they say yes or no. If you try calling 3 times without connecting you can leave a message. Keep notes of calls so you can leave a reminder for the "yes" people.

•Some ways to advertise the meeting: post flyers and posters (see www.truecostoffood.org for a downloadable poster) in the neighborhood; call newspaper, radio and TV stations that have community bulletin boards; ask for announcements at local meetings; send notes to everyone in your e-mail address book; and ask for e-mail addresses from local groups.

•There are four little words that always aid recruitment: Refreshments will be served. Find out if your host allows food. If you decide to supply refreshments, keep it simple: organic cheese and hummus with crackers, fresh organic crudites (in season), a cake baked with organic fruit or fruit juice.

•Test your equipment at your site before the meeting; make sure the video will play and is visible from all parts of the room and loud enough for everyone to hear.

Setting the Agenda

•Spend some time looking at the discussion guide before the meeting and choose the issues you'd like to cover. You don't have to become an expert on every issue and you shouldn't present yourself as an expert if you're not. You might want to ask someone to share the job with you.

•Invite a local farmer, maybe one who runs a CSA or is part of a farmers' market, to speak after the film or just be there to answer questions.

•Prepare a list of questions that will stimulate discussion, but be flexible in allowing the audience to adjust the agenda.

During the Meeting

•Pass around a sign-in sheet so you have a record of attendance. Get name, address and e-mail. Include a box for people to check if they want to be contacted for future events or when action is needed on legislation or other issues.

•Ice breakers can get conversation started. Before or after you show the video, ask if people know various info: For example, it takes 2500 gallons of water and a gallon of oil to raise one pound of beef; we use 3 pounds of pesticide for every person in the country.

•When the video is over, mention that the figures mentioned are not exact; there's no way to quantify some of the hidden costs, like loss of wild places, or poor nutrition leading to ill health. You might want to repeat the committee's mission and talk about the video's goal: to make people think about what they're eating and about alternatives that are kinder to the planet and better for us.

•Don't rephrase or put words in people's mouths. Don't criticize any answer. Always be supportive and encouraging.

•Don't slip into being an expert or a lecturer. Your role is to make people aware of how their food is being grown and give them ideas on what can be done to counter the problems. Unless you are an expert or willing to spend a lot of time in research, it is much easier to run a participant-centered program than a traditional teacher-centered class. You do not have to know it all.

•Watch the clock and make sure to leave some time to discuss a project that the group can handle.

Closing the Meeting

•At the end ask for a show of hands on "How many of you are going to make a commitment to tell someone what you learned here?"

•Ask what they liked about the meeting or what they would like to see different or improved.

•Encourage people to hang out and talk about what they would like to do to get the word out about the True Cost of Food and what actions they will take. (See www.truecostoffood.org for a checklist of projects). Show the video again if anyone wants to see it.

•Most important: Stress the importance of spreading the word and encourage everyone at the meeting to set up another meeting at a school, health club, religious or community organization, even a book group or a family reunion. Once someone has shown interest in running a meeting, be sure to call them within 3-5 days, encourage them to make it happen and ask if there is anything you can do to help. Keep a list and follow up weekly to biweekly.