GO TO GUIDE - ARMY EARTH DAY



U.S. Army Environmental Command

http://aec.army.mil

Celebrating Army Earth Day

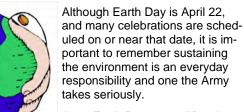
Earth Day is an international event raising awareness of and concern for the environment. First celebrated April 22, 1970, Earth Day rallied more than 20 million Americans in support of environmental activities.

The event was the largest grassroots movement in U.S. history and also sparked the first major pieces of environmental legislation: the Clean Air Act and Clean Water Act.

Earth Day is now a worldwide event which hundreds of millions of people in close to 180 countries celebrate each April 22. It represents a U.S. and international commitment to envi-

ronmental security. The Army Earth Day poster and Army-wide activities are part of that celebration.

With more than 13 million acres of land and hundreds of plant and animal species in its care, the Army, its Soldiers, Families, and Civilians recognize the importance of sound environmental stewardship.



Army Earth Day exemplifies the Army's commitment to protect the public resources entrusted to

military care and provides an opportunity to focus attention on its environmental program.



Setting Program Goals

Be selective in the programs or projects you plan to display. Consider your overall installation environmental program in your planning, addressing topics in compliance, conservation, pollution prevention, cleanup (installation restoration), and Net Zero.

Think about the type of event you want. Will your event have a carnival atmosphere with games and clowns, or will it include serious speakers addressing a seated crowd? Either one or a combination of both is appropriate, depending on the audience you want to reach. It is not a good idea, however, to book an entire day of speakers.

Remember that games for children are fun and easy to do, and children bring the added bonus of parents.

If the local community has planned an Earth Day celebration, ask about participating in those festivities rather than staging a separate event. Your participation should complement the community event while promoting awareness of the Army's environmental program record. By joining in such events, you take the Army message to the community and enhance the Army's reputation as a good neighbor.

Inside this Guide

Celebrating Earth Day 1 Working With Volunteers

Setting Program Goals 1 Delegating Responsibilities

Planning an Earth Day 2 Promoting Your

Program

Assembling an Earth Day 2 Recommended Earth Day Team Activities

Tapping Resources 3 Army Earth Day Messages

Appendices

A -Earth Day Publicity Materials

B- Building a Solar Box Cooker

C - Recipes for a Healthy Environment

D - Composting Yard Waste



Planning an Army Earth Day Event

Planning an installation-wide Army Earth Day event is like planning a community appreciation day, only with the environment as the focus.

As with all post-wide events, planning for Earth Day begins with getting installation leadership support early enough to ensure a place on the installation calendar.

Secure Commander approval in early January, then make sure the date - April 22 or another convenient day - is on all participants' and leadership calendars. Begin holding planning meetings.

Command endorsement is step one in creating a successful Earth Day event; the next is assembling a good team.

Assembling an Earth Day Team

Pulling together a team of interested and dedicated individuals is crucial to an event's success. Team members are responsible for selecting sites, dates, and activities to support the theme; developing event goals; generating publicity; and providing activities, exhibitors, and entertainment.

Your core team members should come from:

The post environmental staff has valuable experience in all aspects of environmental management and can provide technical support in arranging displays or showcasing the installation's environmental programs, projects and successes. They also have valuable contacts with outside environmental agency personnel who may provide information materials or be interested in partnering with you to put together an exciting event.

A Public Affairs Office (PAO) develops the command media and community relations programs, and deals with a variety of off-post organizations and civic leaders. Public Affairs staff can:

- Heighten awareness and encourage attendance by sending out articles, announcements, and media releases to installation and local media outlets.
- Function as official spokespeople for offpost\media queries.
- If appropriate, arrange services of an Army band.

Morale Welfare and Recreation (MWR) staff are often responsible for installation recreational facilities, such as parks and open spaces. They also sponsor many Soldier and Family activities so could be a good partner for your Army Earth Day event.

Your MWR can help reserve space for an event, or suggest activities for the location.

Your MWR may be able to coordinate with its marketing office, which can help with many promotional items. Only your MWR representative is authorized to accept or acknowledge corporate support such as money, services, and products.

April is the Month of the Military Child, so you may want to combine your Army Earth Day with an MWR event. Partnering with a school that serves military families can promote understanding of the Army's environmental goals.

The Office of the Staff Judge Advocate's environmental law specialists should be included for both event ideas and to ensure compliance with fiscal law and ethics regulations.

The Safety Office, Directorate of Public Works, Military Police, and other staff and organizations, also can be valuable resources.

Restoration Advisory Boards, which provide public input to Army environmental restoration programs, are important links to the community and should be included.

Plan a short kickoff meeting at a time and location convenient to all team members. Ask the members to introduce themselves and describe what they can contribute to the team.



Tapping Resources

Make a list of installation and community organizations that can support your Army Earth Day events. Possibilities include:

- U.S. Army Environmental Command
- · Post graphics staff
- · Post print shop
- · Post photo lab
- · Post Protocol office
- Organizations such as the Family Readiness Group, Spouse's Club
- State and local parks and recreation departments
- State departments of wildlife, game and/or fish
- Museums and nature centers
- Extension services such as the agricultural extension service
- Environmental organizations such as The Nature Conservancy and Audubon Society
- The local U.S. Environmental Protection Agency and other state and federal environmental agencies

- Youth organizations such as college student unions, scout troops, and high school ecology clubs
- Recycling and beautification associations and organizations
- Grassroots organizations and civic groups such as the Rotary Club, Jaycees, Kiwanis, Junior League, and League of Women Voters
- Retirement groups
- Organic lawn care and pest control companies
- Businesses that produce pollution prevention products, composters, recycled products, etc.
- Dance troupes, musicians, and artists
- Radio and TV stations, and newspapers, which may promote or report on the event

Coordinate outreach efforts with your PAO and Staff Judge Advocate to ensure compliance with all fiscal and ethics rules.



Working with Volunteers

Incorporating volunteers into the planning process can enhance any Army Earth Day event.
Volunteers not only add to your ability to make the event a success, they also help both the planning and the event build a



sense of community among all the groups working on the project.

When you seek volunteers from organizations such as those on the "Tapping Resources" list, ask them to provide information on their skills and interests along with their name, email address, and phone number.

Once you have evaluated your volunteers' skills, match people with tasks they will enjoy. Also look for opportunities for activities you may not have already planned. For example, an Eagle Scout candidate from your local Boy Scout troop may want to complete a project in conjunction with your event.

Keep volunteers informed, and make sure they have the resources and time they need to complete their projects.

Seek input from volunteers. Trying to include their ideas will encourage others to share their thoughts and be creative.

Most people volunteer because they want to make a difference in their community. As you acknowledge their hard work, be sure to point out how the community benefits from their participation. Not only will this specific praise help you keep the volunteers you have, it will encourage others to volunteer at your next event.

Again, it is important to coordinate with your Staff Judge Advocate to ensure that your volunteer activities are in compliance with the law.

Delegating Responsibilities

Choose a coordinator for each of the following event areas:

- 1. Exhibitors, volunteers, and sponsors (remember your MWR representative is the only one who can procure sponsorship or accept donations)
- 2. Entertainment
- 3. Production
- 4. Publicity

Make a list of action items for each coordinator and a schedule for completing those actions. If available, use checklists and "lessons learned" from past major public events, such as the installation's community appreciation day.

Action items include:

1. Confirm a date for your event. A week-long celebration can have the greatest impact, especially if it ends with a parade, festival, or luncheon. If you are going to open your event to the public, you may choose to stage your event over the weekend rather than on the traditional Earth Day of April 22.

When setting the date, avoid competing events, such as Arbor Day festivities or other community

events. Get your date on the installation calendar as soon as possible to avoid potential conflicts.

- 2. Reserve a location based on:
- The number of people you expect to attend
- Climate (don't pick a picnic shelter if it's still cold in your part of the country)
- Availability (reserve locations ahead of time whenever possible)
- Suitability (Can you set up booths or tables? Is electricity available? Are restrooms nearby? Is parking available?)
- 3. Prepare a draft schedule, keeping in mind that it is likely to change. Have speakers and entertainers commit early to appearance dates and times. Do the same for exhibitors, and give them time to set up and tear down their booths.
- 4. Coordinate your agenda with the post Security and Protocol offices as soon as possible. Security can help with on-post access and other security concerns. Protocol can help with distinguished visitors and other protocol issues.

- 5. Compile an invitation list. Let the post Protocol and Public Affairs offices help you identify your target audience. This can be as simple as inviting all installation personnel, local radio and TV stations, the local newspaper and city officials.
- 6. Order Earth Day posters and flyers. USAEC's Public Affairs Office has a limited amount of Army Earth Day supplies, including an annual Army Earth Day poster and message. Posters can be ordered from January through mid-February for delivery in April. Your installation printing office may also be available to reproduce your own version of Earth Day materials. USAEC's PAO can provide the electronic version.
- 7. Reserve the post marquee through MWR. Determine ahead of time what you want to say, and include event locations and times.
- 8. Make site arrangements based on your needs. Do traffic cones need to be set out? Will you need recycling bins as well as trashcans? Determine the people responsible for these items on your installation and make arrangements to obtain what is needed.

Promoting your Program

Work with your Public Affairs office to publicize your event through the local media and the post newspaper and bulletins. See if Public Affairs can assign a staff person to coordinate your event publicity. Include pertinent information about your events, such as the who, what, when, where and why. Also include the name and phone number of a committee contact person. Submit news releases to newspapers and radio, local TV, and cable stations at least a month in advance and plan to follow up to confirm their attendance. Coordinate national coverage with the HQDA Office of the Chief of Public Affairs after initiating the process through your installation Public Affairs office.

To further promote your program, your Public Affairs office can:

 Host a media day and invite local media to the installation to show off innovative, Earth-friendly systems and processes. Provide the media with a diverse summary of program initiatives and accomplishments. Include an installation tour to show how your post incorporates environmental concerns when meeting its mission objectives. Provide photo opportunities that show success in pollution prevention, conservation, cleanup, or compliance.

- Submit articles on the history of Earth Day and previous installation events to army.mil, installation or local newspapers, or via social media. Send short, informative sound bites to local radio stations.
- Submit weekly "Did You Know?" environmental trivia briefs, or environmental tips to the installation newspaper or publish using social media.

For more information on promoting your Earth Day event, see Appendix A.

Recommended Earth Day Activities

Army Earth Day events should promote environmental awareness and education. The activities below have proven to be successful Earth Day celebrations. Many of these activities require minimal funds.

Make your Army Earth Day a full-circle event; if it generates funds, designate them to support an environmental project of interest to the installation and the community. If possible, tie activities to success-

ful programs on your installation.



Conduct an **environmental installation tour** to introduce the community to your installation's environmental programs. Show off innovative systems, such as closed-cycle wash racks, nonhazardous paint stripping operations, firing-range bullet traps, small parts washers, drum compactors, oil filter presses, and aerosol can disposal systems.

Or, set up an **environmental fair** with displays and exhibits to teach Soldiers, Families, and community members about good environmental practices.

Hold an "eco-thon," an event similar to a walk-a-thon. Have participants collect pledges based on how many Earth Day educational displays they visit, then set up several booths in a field or auditorium. The participants go from booth to booth, learning about ways your post protects the environment. The funds raised can be contributed to an environmental program, such as a riparian forest project.

Hold a **drive** to recycle or repurpose clothing and household textiles. Check with the environmental office to see if there is a nearby facility that accepts these items. Ask people to



bring clean clothing, sheets, nylon curtains, drapes, hats, paired socks and paired shoes to a central point (a parking lot or post recycling center) for collection and delivery to the facility or facilities. Can also be done for furniture, electronics or other large recyclables to encourage reuse or for special items like eyeglasses and hearing aids..

Offer **environmental tours** of recycling centers or (if your installation has one) the hazardous material pharmacy.

Conduct **essay or poster contests** at local schools.

Hold an Earth Day **logo design contest** at the local high school or college.

Offer an environmental speaker's bureau and have installation environmental staff visit area schools or community groups to discuss sound environmental practices, how the Army is employing them and what similar things they can do. Note: schedule the visit as soon as possible to get on the school calendar.

Make a "humanitree" out of recycled materials and attach leaves cut from discarded paper bags. Write a promise on each leaf related to saving the environment.

Invite Soldiers and Families and/or community to help with a grounds cleanup to remove rocks and debris from the installation or a school playground. Award prizes to those who collect the most debris.

Conduct an **installation cleanup day** or clean up trash along a stretch of public land.

Sponsor an Earth Day fun run/walk through a "natural" area of your installation.

Set up an **environmental maze** using stakes and surveyor's tape (very low cost). At each break in the path, ask an environmental question or have a station or poster providing environmental tips that give clues to get to next stop.

Host a **recycling fashion show** with outfits made out of recycled materials.

Energy Conservation

Have a **vehicle reduction day.** Ask employees on post to ride bicycles to work, take public transportation or car pool.

Display alternative fuel vehicles hybrids, electric, solar or natural gas powered vehicle (contact your local utility company for assistance).

Conduct a **solar bake-off**. Set up solar box cookers for participants to try different recipes. Give a prize to the creator of the best recipe (such as nachos, hot dogs or baked potatoes). (See Appendix B)

Natural Resource Conservation

Host a **tree-planting ceremony** with trees donated from the National Arbor Day Foundation.
Choose trees that are indigenous to your area that can provide habitat and food to animals, as well as create a protective canopy.

More Earth Day Activities



Host a **plant recycling event**. Have people bring unwanted indigenous plants or seedlings from their yards to a common area on post for planting or distribution.

Build birdhouses and install them throughout the installation. Tell participants about the birds you want to attract, why they need artificial nests and the value these birds bring to the local ecosystem.

Hold a "bird walk." Contact your local Audubon Society to enlist the help of a skilled bird watcher who can identify and count birds on your installation. Point out which birds are year-round residents and which are migrants, and discuss their habitat requirements. Provide an identification pamphlet.

Hold a "tree walk" to identify native and exotic trees. Describe each species' value to the local ecosystem (source of shade and nesting cover, for example). Provide an identification pamphlet.

Have a **"Paul Bunyan"** contest. Find the largest tree in the area. Measure the tree by the number of people that can fit around it by holding hands.

Conduct a **nature photo contest** and display best photos on line.

Play "habitat hide-and-seek." Create a home for a selected animal. Ask contestants to find the home and identify its occupant. Host a **kids' fishing derby** at installation ponds, and ask state game biologists to describe their catches to them.

Make **educational trails** with legends identifying trees and plants. Also, place garbage along the trail, with signs explaining how each item harms the environment. For example, put a sign next to a plastic bag explaining how a turtle can swallow it and die.

Locate and **identify edible plants**, such as nut and fruit trees, honey-suckles, grapevines, rose petals, and mint leaves.

Start a **community garden**, pumpkin or wildflower patch, strawberry or sunflower field by planting seeds in a common area.

Donate plants or flowers students plant in biodegradable pots to a children's hospital or nursing home.

Restore an erosion area.

Visit a **wildlife conservation area** and have a natural resources expert discuss the project.



Pollution Prevention

Hold a "dirty sock contest" in a parking lot to demonstrate how auto emissions affect air quality. Ask contestants to place a clean white sock over their car's exhaust pipe and run the engine for 30 seconds. The contestant with the dirtiest sock wins a free tune-up at the installation's auto hobby shop, while the one with the cleanest sock wins a trip or other comparable prize. Remember to use all relevant safety precautions during this activity. Local vendors can donate the socks and prizes, but your MWR representative must coordinate this.

Creating a greenhouse demonstration to explain global warming. Place two shallow cardboard boxes side-by-side in the sunlight. Put a thermometer inside each box, preferably in a shaded area. Place a piece of glass over one of the boxes, creating a tight seal. Within minutes, the temperature in the glass-covered box will rise above that in the uncovered box. For an added touch, measure the rate at which ice cubes melt in the boxes.

Stencil storm sewers:

Do Not Dump --Sewer Drains to Natural Waters.

Waste Management & Restoration

Host a household hazardous waste turn-in day. Reusable items, such as paint, can be donated to the self-help store. The installation can dispose of all other materials.

Have a "recycling sale" where participants get tickets in exchange for their recyclable items. They can trade tickets for prizes (coloring books, reusable drink bottles, etc.).

Cleanup a mini landfill. Dump a load of trash onto the lawn and ask for volunteers to don masks, goggles, and gloves and separate the trash. This activity demonstrates the large amount of recyclables that are thrown away and will save the materials from the local landfill (don't throw recyclables back into the trash).

Demonstrate **nontoxic cleaning options**. You will need a few basic household ingredients and some dirty cloth, metal, and glass (see Appendix D for directions).

Build a compost pile. You will need dry leaves, dead weeds, shredded cardboard, grass clippings, and plants. Put the ingredients in piles so participants can add to the recipe (see Appendix E for directions).

Conduct a **tour of an environmental cleanup site** and explain the process.

Continued on bottom of next page.

Army Earth Day Messages

You can use the material below when writing Earth Day speeches and articles, or when speaking generally about the Army's environmental program.

"The Army is committed to environmental stewardship in all actions, and operations."

"The Army is a good steward of the environment."

"Environmental stewardship supports military readiness and quality of life."

"Sound environmental practices are part of everything a Soldier does; thus, every day is Earth Day to the Army."

"The Army restores, preserves, and enhances resources entrusted to its care by the American public."

"The Army is a responsible steward of national cultural and natural resources."

"The Army obeys and enforces all local, state, and national environmental laws."

"The Army is the steward of approximately 13.6 million acres of land, including 1.3 million acres of wetlands.

"The Army is committed to saving energy, reducing solid waste, and generating funds through aggressive pollution prevention efforts."

"The Army uses relative risk evaluation to ensure that the most serious sites are cleaned first."

"The Army looks after more than 184 threatened and endangered species on 79 separate installations."

"Overall, the Department of Defense has a higher concentration of threatened and endangered species per acre than any other federal agency, including the Forest Service, the National Park Service, the Fish and Wildlife Service, or the Bureau of Land Management."

"More than 66,000 Army buildings are over 50 years old and subject to National Historic Preservation Act. The Army preserves these buildings in accordance with applicable federal regulations."

"The Army works closely with public and private institutions in the United States and around the world to protect and clean the environment."

"The Army works diligently to find faster, better, and cheaper ways to clean up the environment."

"The Army works aggressively to find innovative ways to prevent pollution and restore the environment."

"The Army leads the military in exploring ways in which it can preserve biological diversity while enhancing the military mission."

"The Army is committed to environmental excellence through stewardship, vigilance, and partnership with the community."

More Activities (cont'd)

Stage a "Great Balls of Foil" contest in which schools or other organizations create large balls of recycled aluminum foil. Display the balls at your event and weigh or measure them to determine the winner.

Create a display board that tracks a restoration project from start to finish.

Distribute **environmental fact sheets** describing your installation cleanup, conservation, compliance, and pollution prevention projects.





Acknowledges the Past

By remediating Army lands to usable condition, while preserving and protecting cultural and historical resources

Engages the Present

By meeting environmental standards, enabling Army operations, and protecting Soldiers, Families and communities

Charts the Future

By institutionalizing best practices and use of technology to ensure future environmental resiliency

U.S. Army Environmental Command

2450 Connell Road, Bldg 2264 Fort Sam Houston, TX 78234-7664

Phone: 210-466-1590
Toll-Free: 855-846-3940
E-mail: usarmy.jbsa.aec.mbx@mail.mil

Visit us on the web:
http://aec.army.mil

Spread the word about Army Earth Day

Create some buzz about Army Earth Day in your community.

Signage

Customize the Army Earth Day posters and use as flyers to post on site. Ask your local partners to post them in their offices or buildings.

Local media

Issue a news release about your Army Earth Day event, and get listed in local community event calendars on air, online or in print.

Social media

Post a promotional message on your organization's Facebook pages. Or tweet about it on your Twitter feed.

Leverage other events

Build on other events planned in your community including educational presentations, special collection drives, recycling competitions and more.

Print advertising

Customize the Army Earth Day poster to publish in your installation newspaper.

Radio advertising

Contact your local radio stations about their requirements for local PSAs.





Publicity Materials

Having a successful Army Earth Day event can largely depend on getting information about your plans and activities out to the right audiences. If your event is for the community, you will want to reach more people than if it is just for the installation or a local school, but all of these can call for the development of some type of publicity materials.

The garrison, installation and/or MWR Public Affairs Officer (PAO) should be part of your planning meetings and will assist you with determining the types of materials you need and developing them. However, depending on their other duties

and the scope of your event, the following tips can help you plan what you need, how to get it done and who should receive it.



The Best Publicity Materials for Your Event

Small Activity for School, Club or Organization (Cleanup, Presentation, Planting)	Event for Installation Soldiers, Families and Civilians (Fair, Tour, Presentation, On-Post Cleanup/Planting)	Community-Wide Event (Fair, Tour, Presentation, Off-Post Cleanup/Planting)
Email, and/or flyer asking for volunteers.	Email, social media posting and/or flyer announcing event. Media release or advisory to garrison newspaper.	Notices to mailing list, website posting, community flyer announcing event. Media release or advisory to local media - newspapers, radio, TV.
Photography of activities. Handouts on environmental tips. Giveaways – Bookmarks/Coloring Books. If school/organization approves, invite local media to cover activity (Get approval well in advance)	Invite local media to cover activity. Photography of activities. Brochures on environmental tips. Giveaways – Bookmarks/Coloring Books.	Invite local media to cover activity. Photography of activities. Brochures on environmental tips. Giveaways – Bookmarks/Coloring Books.
Article to garrison newspaper.	Article to garrison newspaper.	Article to garrison newspaper. Follow up with local media who didn't attend.

Notifying Your Audience:

Notices of events can range from simple mailers or emails giving information on "What, When, Where, Why, Who and How." An announcement through social media or a website can provide similar information. Media advisories are invitations telling reporters from local newspapers, and radio and TV stations about the event and giving details that show why the story will be of interest to their readers/viewers. Media releases put all the information regarding the event into news article format, making it easy for reporters to use as written or rewrite. Flyers should be eye-catching as well as brief and to the point, with the main facts (what, where, when) large enough to read from a distance.

Anything going out to the public or media should be coordinated through your PAO and all notices should include a means of contacting the PAO or event coordinator for further details.

Notices and news releases announcing the event should be distributed at least two weeks before your event. Flyers should posted at least three weeks before the event. The installation PAO should arrange any media interviews or attendance at Army Earth Day events.

Sample Initial Release/Notice: (Distribute to generate interest in your event).

"As part of its ongoing commitment to sound environmental stewardship, Army installations worldwide are joining with their local communities to celebrate Earth Day on April 22. Activities at (installation name) will include an environmental fair on the parade ground parking lot (address or intersection) from 11 a.m. until 3 p.m.

The fair will feature games, demonstrations and information booths designed to increase environmental awareness and share ideas for saving energy, cutting water usage and reducing waste.

Local business along with environmental groups and agencies, including the U.S. Environmental Protection Agency, are joining (installation name) for this Earth Day event. Contact (POC email and phone number) for a complete itinerary of Earth Day activities."

Create an additional release closer to the event highlighting specific activities, times and locations or send photos and an article on the day of the event to encourage follow-up coverage.

Photography:

Photos are a great way to tell the story of your event, but be aware that not everyone wants their photo taken or published. Being at your event does not necessarily grant permission to use someone's identifiable photograph with a news article for the garrison or other newspaper. Especially where children are concerned, such as at a school event, be sure you have the teachers' and principal's permission to take photos and clear the photos with them prior to submitting with an article. Have your photographers get a release from the subject or subject's parents for any photos they think could be submitted to a paper or put online. Also have your Operational Security Officer clear photos being sent our or posted.

Brochures and Other Handouts:

Remember this is Earth Day, so keeping paper use at a minimum should be part of the plan. However, if there are some key facts you want people to take away from your event, a brochure or other handout might be help attendees remember those energy-saving tips once they get home. These items should be brief and to the point, easy to read and visually interesting. A great idea is have one brochure with several important point from the event displays/demonstration and a web link or social media site where they can go for more great ideas.



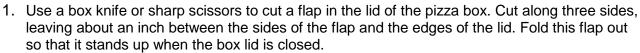
Visit us on the web: http://aec.army.mil

Building a Solar Box Cooker

What You Need:

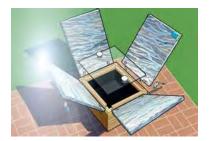
- Cardboard pizza box (the kind delivered pizza comes in)
- Box knife or scissors
- Aluminum foil
- Clear tape
- Plastic wrap (a heavy-duty or freezer zip lock bag will also work)
- Black construction paper
- Newspapers
- Ruler, or wooden spoon

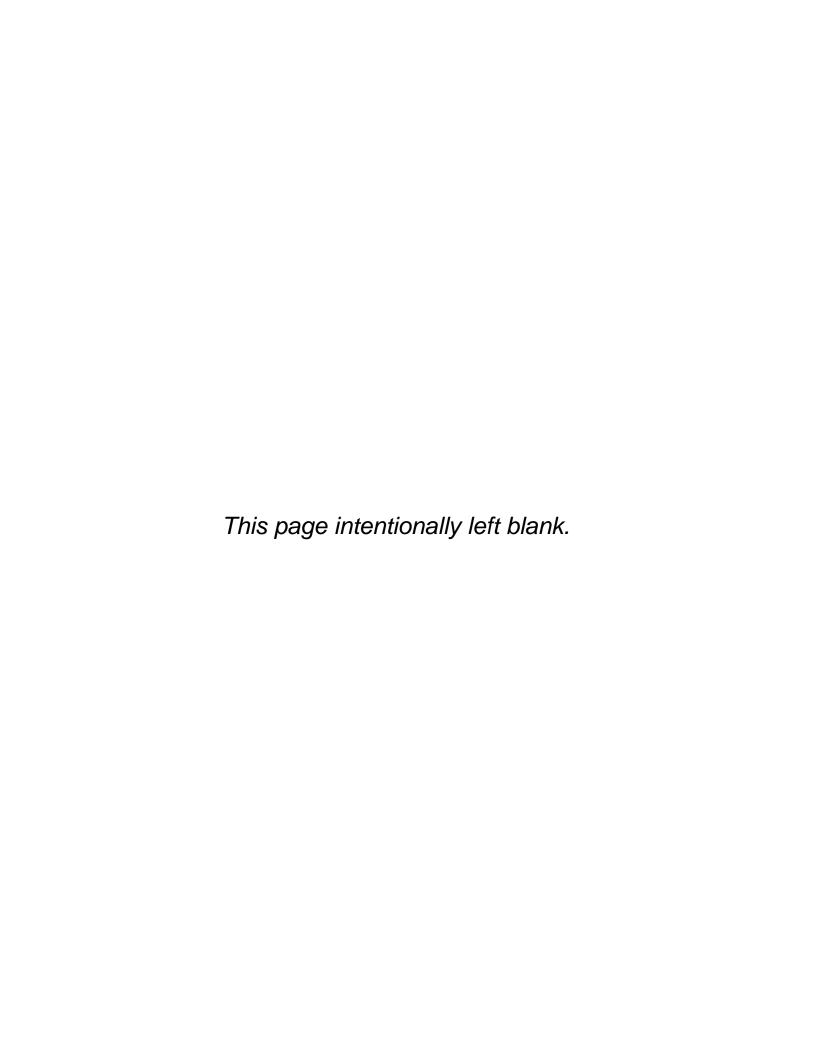




- 2. Cover the inner side of the flap with aluminum foil so that it will reflect rays from the sun. To do this, tightly wrap foil around the flap, then tape it to the back, or outer side of the flap.
- 3. Use clear plastic wrap to create an airtight window for sunlight to enter into the box. Do this by opening the box and taping a double layer of plastic wrap over the opening you made when you cut the flap in the lid. Leave about an inch of plastic overlap around the sides and tape each side down securely, sealing out air. If you use a plastic bag, cut out a square big enough to cover the opening, and tape one layer over the opening.
- 4. Line the bottom of the box with black construction paper black absorbs heat. The black surface is where your food will be set to cook.
- 5. To insulate your oven so it holds in more heat, roll up sheets of newspaper and place them on the bottom of the box. Tape them down so that they form a border around the cooking area. The newspaper rolls should make it so that the lid can still close, but there is a seal inside of the box, so air cannot escape.
- 6. The best hours to set up your solar oven are when the sun is high overhead from 11 am to 3 pm. Take it outside to a sunny spot and adjust the flap until the most sunlight possible is reflecting off the aluminum foil and onto the plastic-covered window. Use a ruler to prop the flap at the right angle. You may want to angle the entire box by using a rolled up towel.
- 7. You can make toast by buttering a slice of bread, or sprinkling cheese on it, then letting the sun do the rest. Cooking a hot dog or making nachos with chips and cheese are also fun treats to make in your solar oven! It would also work great to heat up leftovers. So the paper at the bottom doesn't get dirty, put what you would like to cook on a clear plastic or glass plate. A pie plate would work well.

To take food out of the oven, open up the lid of the pizza box, and using oven mitts or potholders, lift the glass dish out of the oven





Recipes for a Healthy Environment



Have you ever thought about how many chemicals you use every day? Do you wonder how they may be affecting the environment?

Some disinfectants, cleaners and even air fresheners contain chemicals that can potentially damage your health, as well as the environment. However, by substituting chemical with natural ingredients you can clean up your home, office, clothes, and the environment.

These Earth-friendly products are made with readily available ingredients that work as well or, in some cases, better than traditional cleaners

Just implementing a few of these at a time will go a long way toward creating a chemical-free house, a safer environment and a healthier family.

Floor and Rug Cleaners

- Ceramic Tile: Clean using a solution of 1/4 cup baking soda, 1/2 cup white vinegar, 1 cup ammonia and 1 gallon warm water. This solution also works well as a general cleaner.
- Linoleum/Vinyl Floors:
 - Polish with a mix of 1 part thick boiled starch with 1 part soap suds. Rub this mixture on the floor and polish with a clean, soft, dry cloth.
 - To strip commercial floor wax, pour club soda on the surface, scrub, let soak for a few minutes and wipe clean.
- Wood Floors: Damp-mop with a mild vegetable-oil soap; dry immediately.
- Rugs/Carpets
 - Mixing 1/2 cup dishwashing detergent and 1 pint boiling water.
 - Cool and whip into a stiff foam with an electric mixer.
 - Apply the solution to 4-by-4-foot sections with a damp sponge.
 - Wipe off the suds and rinse with a solution of 1 cup vinegar in 1 gallon of warm water, changing the rinse water frequently.
 - Clean your rug on a dry, warm day so you can open the windows to facilitate drying.

Spot Remover

- Butter, Coffee, Gravy, or Chocolate Stains: Scrape off or sponge up as much of the spot as possible. Then dab with a cloth dampened in a mixture of 1 teaspoon white vinegar and 1 quart cold water.
- · Grease Spots:
 - Apply a paste of cornstarch and water.
 - Cover with baking soda or cornmeal, let dry, and brush off.
 - Scrub the spot with toothpaste.
 - On rugs, sprinkle dry cornstarch on the spot and vacuum.

Furniture Polish

Use olive oil, lemon oil, beeswax, or a mixture of bees wax and olive oil. A pint mineral, vegetable, or olive oil combined with 2 teaspoons lemon oil in a spray bottle also works.

Metal Polish

- Silver:
 - Place the silver in an aluminum or enameled pan lined on the bottom with aluminum foil.
 - Fill with enough water to cover the silver.
 - Add 1 teaspoon baking soda and 1 teaspoon salt.
 - Boil for 3 minutes.
 - Remove the silver, wash in soapy water, and polish.
 - Do not use this method for silver jewelry or flatware with hollow handles.
- Brass: Scrub with Worcestershire sauce or toothpaste; or apply tomato ketchup, let sit, and remove when dry. Or, clean it with water in which onions have been boiled.
- Copper: Apply white vinegar and salt, and rub.
- Brass or Copper: Use a paste of lemon juice and salt.

Glass Cleaner Pour any of these mixtures into a spray bottle. Spray on and wipe off.

- 3 tablespoons ammonia, 1 tablespoon white vinegar and 3/4 cup water.
- 1 quart water with 1/2 cup vinegar and 1 to 2 tablespoons of lemon juice or rubbing alcohol.

Oven Cleaner Commercial oven cleaners usually contain lye, which is extremely toxic. Instead:

- Apply a paste of water and baking soda to the spot, then scrub it with steel wool. (Be careful not to get any of the mixture on the heating elements.)
- · Sprinkle salt on spills while they are warm and scrub them off.

Drain Cleaner Prevent drain clogs by covering drains with screens to keep out grease, hair, and food scraps. If blockage does occur:

- Pour 1 cup each. baking soda, salt and white vinegar down the drain. Wait 15 minutes and flush with boiling water.
- The less-determined can toss a handful of baking soda and 1/2 cup vinegar down the drain, cover tightly for one minute. Rinse with hot water.
- Use a plumber's snake or plunger on tough clogs.

Toilet Bowl Cleaner

- Pour 1/2 cup chlorine bleach into the bowl. Let stand for 30 minutes and scrub clean.
- Scrub with a solution of 1/2 cup borax in 1 gallon of water.

Disinfectant and Germicide

Soapy water works well in place of a disinfectant.

Air Freshener/Deodorizer

Air fresheners do not really freshen air, they diminish your sense of smell with oil or other chemical so you no longer smell the offensive odor. Instead, try vinegar or lemon juice in a spray bottle, or set small dishes of vinegar, lemon juice or baking soda around the house. A cotton ball soaked in pure vanilla will overpower odors in the car or refrigerator. Grind lemons in the garbage disposal for a fresher smell.



Composting Yard Waste

What is it?

Composting is a natural process, basically decomposition or rotting, that converts organic waste - leaves, grass clippings, small twigs and most kitchen scraps - into a dark, crumbly material that makes a rich soil additive. The waste is broken down by naturally occurring microorganisms into a product suitable for mulching, fertilizing or conditioning soil.

Why Compost?

Adding compost to soil helps it retain moisture and makes soil easier to till. Plants grow better because the soil has more nutrients, resulting in less need for chemical fertilizers. More importantly, it keeps waste out of landfills and repurposes them in a beneficial way.

Getting Started - The Container

While starting a compost pile is more involved than just raking leaves into a pile, the whole project is fairly simple and generally can produce a good batch of compost every three to four week.

Compost can be made almost anywhere. A bin isn't necessary. An area to pile leaves and grass clippings together will do, but that can be messy and unattractive. Wooden stakes and chicken wire can be used for a simple compost bin. Inexpensive collapsible plastic bins are sold at most garden stores and are good for military families who move frequently.

A good, permanent bin is a sturdy wooden box, approximately three feet by three feet. It should have a cover and a large side opening that provides a place to stir the compost and to remove it.

After deciding on a compost container, choose a level spot large enough to accommodate it. It should be near a water source, cleared of grass or other vegetation, and preferably out of direct sunlight and away from the house. The compost bin works best if it is off the ground as this allows better ventilation. A wooden palette or logs covered by chicken wire make good base for the bin.

Getting Started - Ingredients

The four most important things to remember in composting are green, brown, water and air.

- Bring together green ingredients (fresh grass clippings, weeds, kitchen scraps, etc.) and
- **Brown** ingredients (dry leaves, hay, straw, wood chips, etc.)
- Add water to keep this mixture damp but not soggy. (It should maintain the consistency of a squeezed-out sponge.)
- Turn the pile every few days to mix old and layers, and to add enough **air** for the microorganisms to thrive. (Burying a perforated pipe in the pile will supply a constant stream of fresh air.)

The green ingredients supply nitrogen, while the brown ones supply carbon, producing an ideal diet for the microorganisms. Add successive layers of this organic material if possible, but during seasons when dry, brown materials are not available, compost may still be made with only wet, green plant material.

Composting Tips

Branches and other debris should be chipped before being added to a compost bin to accelerate decomposition. If a large quantity of chipped wood is added to the compost, add a small amount of fertilizer to increase the level of nitrogen.

Chopping large material into smaller pieces, keeping the pile moist, and frequently turning the pile can speed up the composting process. The compost pile should begin cooking once it is established and should feel warm to the touch. A carefully maintained compost pile can turn waste into compost in as little as four to six weeks.

What Can and Can't Be Composted?

Most organic materials are acceptable for use as compost, including grass clippings, leaves, coffee grounds and filters, shredded woody yard waste and sawdust, wool and cotton rags, and manure from herbivorous animals, such as cows, horses, sheep and chickens. Many foods can be composted as well, but meats, grease and dairy products should be omitted because they cause odors and attract pests.

Non-organic materials, such as styrofoam, metal, plastic, and charcoal or coal ashes are not suitable for composting. Other materials that should not be composted are diseased plants, food waste that may attract pests, noxious weeds, and pet wastes, which may contain disease.

The Only Option for Yard Waste

According to the EPA, Americans generated about 251 million tons of trash and recycled and composted almost 87 million tons of this material. Reducing our waste is important a we are rapidly filling our nation's landfills, and new sites are difficult to create because of environmental requirements and community objections. Currently there are 23 states that ban some fashion of organics disposal in landfills, mostly leaves, grass and other yard debris. Composting in your backyard recycles wastes that might otherwise go to landfills.

SYMPTOMS	PROBLEM	SOLUTION
Bad Odor	Not enough air	Turn the pile
Dry center	Not enough water	Add water while turning the pile
Damp and Warm	Pile is too small	Add more material to center of pile
Damp, sweet-smelling but not warm	Lack of nitrogen	Mix in a nitrogen source (wet, green material)

