

**MOVING TOWARD SUSTAINABILITY
IN
HOMER, ALASKA
JUNE 14, 2008**

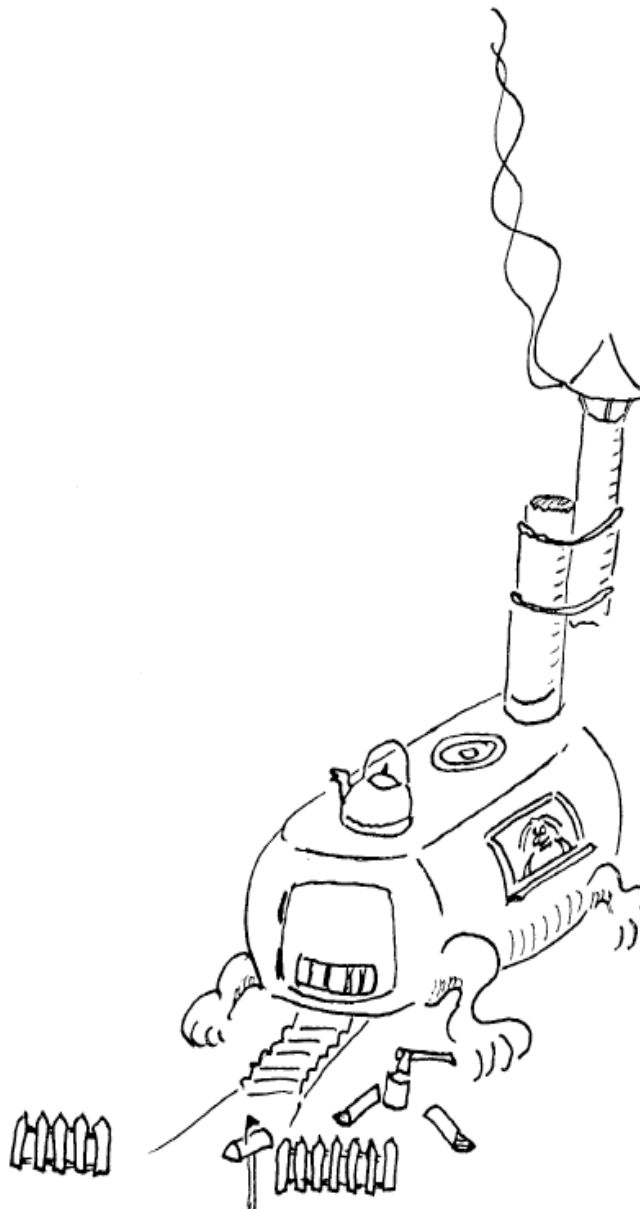


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INTRODUCTION

The thousand mile journey to Sustainability begins with a single step. This catalog highlights Homer area people, projects, and organizations that have taken that first or second step. Some have taken multiple steps and serve as positive examples for the rest of us. In an effort to gather information about some of the inspiring steps that have been taken, I spoke with numerous Homer residents as well as others from farther afield. Many, in addition to providing their own information, pointed me towards others. This project which I envisioned would have a few dozen entries has grown way beyond my expectations.

As you look through this catalog, I hope that you will be inspired to contact some of the individuals and organizations and utilize their information. If you encounter others whose work in some way promotes environmental sustainability or restoration and may warrant being included a future edition of this catalog, please let me know. There is a possibility that this catalog will be available on the web in the future.

It was the annual Bioneers conference beamed to Anchorage in October, 2005 that inspired me and others to share information about the outstanding work that this eighteen year old grass roots organization has done, also to try to apply their work locally for a sustainable future in a tangible way. As a grandmother of three, I am very concerned about the quality of life on this planet that they and the others of their generation will inherit. This project is done with them in mind, with the hopes that we will have turned the corner toward sustainability as they come of age.

Numerous individuals contributed much appreciated assistance in creating the first edition of this catalog included Paul Castellani, at that time president of the Homer Farmers' Market, Marilyn Sigman, director of the Center for Alaskan Coastal Studies, and Dylan Weiser, past president of the Kachemak Bay Conservation Society. Many thanks also went to Jeff Dean, Ann Hackett, Barbara Maynard, Mary Schneider and Cecilia Worth who helped with editing, Neil McArthur for his editing and formatting assistance with the first edition, Dan Thorington who wrote the first preface, and especially to Kyra Wagner who contributed the new preface and helped with editing, Cook Inletkeeper for generous printing support, Todd Gustafson who formatted the current edition, and Jens Klaar who created the illustrations.

Anne Wieland

June, 2008

PREFACE

We are living in changing times. International markets are fluctuating in ways we can't predict, as is the climate. We are increasingly more connected to the world through webs of trade that make us at once more responsible for what is happening at global levels while also making us feel individually powerless to make large-scale change. It is becoming more apparent every day that we need to have a positive focus on what we can do in our own lives and in our own community to become more sustainable.

Sustainability hits a chord with Alaskans since we are both independent by nature and, like here in Homer, dependant on nature. We need to become more creative, more resourceful to adapt to the changes that face us. Luckily, we live in the best place imaginable to get started. Homer has a mystique about it that give us the reputation for artful ingenuity and it's time to put that into action.

This last year has been an impressive one for Homer. As global challenges confront us, Homer has responded by being a leader in action. The City adopted the *Climate Action Plan*, a document that outlines ways to mitigate and adapt to climate change. The Homer Chamber of Commerce adopted Sustainable Homer as a branch of its economic development goals. It's as if there is a wave of energy focused on making Homer a better place to live, work, and play.

But living sustainably starts at home. There are so many simple changes that can be made at home if we know where to get some basic items or information. In this catalog, Anne has put together a collection of information and local wisdom to shed some light on some of the resources we have here that aren't always well publicized. She shows us that there is so much potential locally to network and share that everyone can participate.

Homer is what we make it, so let's start moving toward sustainability!

Kyra Wagner

June 2008

PROMOTING ENVIRONMENTAL SUSTAINABILITY

THE OUTDOOR HABITAT - FOOD AND WATER

As the cost of fuel and food skyrockets, there is increasing interest in raising one's own produce, keeping a flock of poultry or other sources of meat and dairy products, and purchasing the rest grown locally or as close to home as possible. The concept of calculating "food miles", the number of miles that food traveled from its origin to our tables, has grown in popularity. An amazing number of vegetables and fruit trees can be grown here, outside or in a greenhouse. Additionally there are numerous species of wild edibles that can be foraged. Here at the End of the Road it is inevitable that some of our purchases will come from far away, but every bit that we can obtain locally or closer to home will be a gain in freshness and a contribution toward self-sufficiency and sustainability. The following are some local resources:

Sustainable Homer is a relatively new organization here in Homer. Started by a few individuals, the energy created by these dedicated local residents has come together to produce a powerful, dynamic and positive force for movement toward sustainability in many areas of our lives including passage of Homer's Climate Action Plan. On June 9 the Homer City Council hired Deer Stone Consultants, four highly qualified Homer residents, to work with the City to start implementing this plan! Be sure to check the web site sustainablehomer.org for the numerous interesting and useful links and for the monthly calendar and to sign up for weekly email updates.

Homer Farmers' Market features locally grown produce, some organic; flowers, honey, locally created jewelry, art and fiber crafts. June- Sept. Wednesdays 3-6 p.m. and Saturdays 10-3 p.m. on Ocean Drive. P.O. Box 2274, Homer. Contact: Shay Hoffman 299-1060.

Bee Keepers At least 30 people raise bees in the Homer area. Many keep the honey for their own use, but some sell their products locally at the Homer Farmers Market. Bees are shipped to Alaska in April. Contact: Rob Lund 235-3608.

Lower Peninsula Fruit Growers Association Lower Peninsula Fruit Growers (LPFG) facilitates the exchange of information among those interested in growing fruit trees on the Kenai Peninsula. Emphasis is placed on discovering and sharing successful methods leading toward sustainable local food production. Meetings and field workshops covering topics such as orchard design and fencing, soil health, pruning, grafting, pests and diseases, and marketing are held throughout the year. More than 35 varieties of apples, several semi- and sweet cherries, as well as plums, pears, and hardy kiwi are grown locally. Several growers have exotic fruit such as peaches, pluots, and nectarines in heated or unheated greenhouses. Grapes are being trialed. Apples are available at Farmer's Market beginning in early September. LPFG welcomes inquires at 235-2574; or 235-8544, 57670 Taku Ave, Homer, AK 99603.

Composting and organic gardening work well in Homer. To make compost, start with a pile of food waste and plant materials such as grass clippings and leaves, tea bags, coffee grounds and filters. You could add seaweed gathered from local beaches. Don't put fish or meat scraps in the compost as they may attract unwanted scavengers. You need a large

enough pile of material so that the compost heats up. In addition to the size of the pile, getting high temperatures depends on a correct carbon to nitrogen ratio of around 25:1 (i.e. straw is high in carbon and fresh grass clippings or manure are high in nitrogen.) The Rodale composting book gives clear instructions on getting a good ratio. **Recommended book:** “The Rodale Book of Composting” ISBN 0-87857-991-5. **A Newspaper,** “ACRES USA” is also helpful. www.acresusa.com Buying Alaskan-made gardening supplies utilizes local fishery waste and conserves fuel consumed for shipping. **Worm composting** is a nice indoor alternative for those who don't want to attract moose or bears to an outdoor pile.



useful comprehensive organization.

Organically raised non-genetically modified (GMO) food is healthier, significantly reduces impact on the environment and can be purchased locally.

Recommended film “The Future of Foods”. Homer Library has a copy on DVD. Organic Consumers Association www.organicconsumers.org. is a very

Create a Green Roof Use a flat roof surface with several special protective layers, water proofing and growing medium for plants on top that create a new gardening space and natural habitat, help absorb CO₂, as well provide an absorbent surface for rain and considerable insulation. www.greenroofs.net

Root Cellars Several styles are found in Homer. Basement “cold rooms” or unheated entryways within houses which, though insulated, may serve satisfactorily during winter, are too warm in summer. Underground dugout cellars may be subject to flooding, but work well otherwise. Above ground covered structures work well for quite a while. Eventually wooden supports begin to rot out, even if drift wood is used. It’s useful to have a dirt floor and a means of regulating temperature and humidity within the cellar. **Recommended Book:** “Root Cellaring - Natural Cold Storage of Fruits and Vegetables” by Mike and Nancy Bubel 1991 ISBN 0-88266-703-3. Available at the Homer Public Library 641.452 BUB

Roadkill Moose Meat Salvage program Go to Homer Police, fill out application for your area to be placed on a list with others willing to be called to butcher a carcass then clean up the area of kill. You must be available to respond anytime. Illegally taken game seized by State Troopers is occasionally available for Charity Programs.

Canning on Homer Spit of salvaged halibut and salmon waste including bones for pet food is planned for summer 2008. This will create a value-added product instead of discarding the waste. Contact: Nancy Hillstrand 235-9772.

Homer Community Food Pantry - Mission Statement: “To provide emergency food for those in need”. It is located in the basement of the Homer United Methodist Church, 770 East Rd. Homer. Hours are Mondays 1-3 p.m. for perishables pick up, and once a month for commodities. The Food Pantry collects donations of food from several local sources daily, and also accepts food donations from the public including freezer burned fish and meat, also clean glass and plastic containers up to 16 ounces, with lids. In addition to local sources, many tons of food are bought from the Kenai Food Bank which represent only

about 1/8th of the food that is given away annually. 235-1968. There is a new satellite food pantry at the Anchor Point Nazarene Church open Mondays 5:30 to 7 p.m.

Recommended Books and web sites: “Animal, Vegetable, Miracle - A Year of Food Life” by Barbara Kingsolver 2007. ISBN 10-0 06-08255-0

“Discovering Wild Plants - Alaska, Western Canada, The Northwest” by Janice J. Schofield. ISBN 0-88240-355-9

Blog AK Root Cellar - adn.com/akrootcellar by Kim Sollien explores issues about food and food growing in Alaska.

Dr. David Fankhauser web site FANKHAUSER'S CHEESE PAGE- Copyrighted recipes for making cheese. ©David B. Fankhauser, Ph.D., Professor of Biology and Chemistry University of Cincinnati Clermont College, Batavia OH 45103. biology.clc.uc.edu/fankhauser/cheese/CHEESE.HTML

United Natural Foods Inc. **UNFIwest.com** A way to purchase bulk largely organic grains, dairy, and frozen foods. Submit orders once a month. Contact Coal Point 235-3877, a.m. best, or Rebecca Swearingen 299-1890

DEVELOPING YOUR OWN WATER SYSTEM

Along with gardening, developing one's own water system is a definite possibility here. Search the web for **Humboldt ccat water conservation** for a very useful paper on rooftop rain water catchment systems in Humboldt, CA. The techniques can be transferred to our locality. Even the simplest roof gutter installation draining into a container can provide water for utility uses. The web site www.graywater.net has other good suggestions. **A very useful book** is “Water Storage - Tanks, Cisterns, Aquifers, and Ponds” by Art Ludwig. ISBN 0-9643433-6-3.

SAVING WATER

Composting toilets - for settings where sewer or septic systems are impractical or impossible to install. Many different brands of composting toilets can be found on line. For example, an electric two-chambered “Excel” SunMar has been in trouble-free use in the Homer vicinity since 1994. It is electric, with two chambers. The lower chamber contains a removable composting tray above with a heating element under it to promote the process. After a month or so in the tray the dry, nearly odorless product has been used as a very good fertilizer for trees and shrubs but not edibles. The roof-top vented upper chamber is also open at the top with a lid-covered seat. A cup of commercially made bulking material should be added after each use. Experience has shown that the larger model works more effectively for even a 1-2 person household.

The advantage is that composting toilets prevent the contamination of large quantities of water entering the waste stream with the requirement that they be emptied periodically. The disadvantage of electric models is that some power is used to operate them. Non-electric varieties are also available. Other brands of composting toilets use propane or natural gas to incinerate waste yielding a small amount of ash. There is a dealership that carries several brands in Anchorage. Composting toilets used within Homer City limits must be D.E.C. approved. Recommended book: “The Humanure Handbook: A Guide to Composting Human Manure” by Joseph Jenkins. ISBN-10: 0-9644258-3-1

Low flow shower heads and Low flush toilets using less than the standard 1.6 gallons per flush are also ways of saving water and cost of heating shower water.

THE OUTDOOR HABITAT - OTHER RESOURCES

Lumber Locally grown and milled rough-cut lumber. Contact: Steve Gibson
299-1227 gibson@alaska.net

Spring tree and shrub sales Contact Kachemak Heritage Land Trust 235-5263. Others occur seasonally including the Homer Garden Club's spring plant sale.

Homer Animal Friends Low Cost Spay and Neuter Program pays a portion of costs for male and female cats and dogs. Pick up applications for spay/neuter coupons at Barb's Video, 3695 Main St. 235-7454 then make appointment at Homer Veterinary Clinic. www.homeranimals.com



Invasive Plants are nonnative plants that generally have been introduced by human action whether deliberate or accidental and that cause or are likely to cause damage to the environment, local economy or to harm human or wildlife health. In the Homer area, some invasive plant species are Brittlestem Hempnettle, Butter & Eggs, Orange Hawkweed, and European Bird Cherry tree. Others on the Kenai Peninsula are Canadian Thistle, White Sweet Clover, Oxeye Daisy, and Purple Loosestrife which can choke waterways.

You can prevent unintentional introduction of these and other species by removing hitchhiking seeds from pets, your clothing, gear and vehicle tire treads, also by not leaving disturbed soil areas unplanted thus vulnerable to invasion by aggressive nonnative plants. One method for ridding these plants involves pulling the plants from the soil and removing their roots, putting the plants in large plastic bags, then incinerating all the bags. However several species, if the infestation is considerable, will not be able to be controlled in this manner and stronger measures may be necessary. It's also recommended that you ensure what you are deliberately planting is not invasive. The Homer Soil and Water Conservation District has a list of species posted on their web site. If you discover invasive plants and need more information, notify them at www.homerswcd.org or 235-8177 ext 5.

Organically raised Cotton is a much better alternative than conventional cotton. 57 million pounds of chemicals are dusted every year on conventional cotton crops in only six California counties. You can search online for sources of organic cotton or other natural fiber clothing, bedding, backpacks and lots more. You could also encourage local stores to carry organic products including such items as organically grown flowers.

THE INDOOR HABITAT

This section considers how the individual can reduce pollution and waste in the home which in turn affects our own personal indoor habitat and health. The products that we buy and use in our homes, how we use them and where we dispose of them can also have far-reaching effects on the health of the entire community.

Many common substances that we use or discard in our homes can be classified as “toxic substances”. These include household cleaners, shoe polishes, spot removers, paints, solvents, insecticides, herbicides, wood preservatives, wood products containing formaldehyde, metal and furniture polishes, some medications, antifreeze, batteries (both household and car), and used motor oil. Many additional products such as laundry and dish soap and personal care products that are not considered "toxic" contain chemical ingredients that may be harmful to your health and the environment. Natural alternatives exist.

Reducing Pollution

Dispose of used motor oils and toxic wastes such as oil-based paints and solvents at the baling facility in the designated areas and dates. Use alternative household cleaners to reduce the demand and production of toxic substances and keep your indoor habitat healthy. If you need to buy toxic products such as pesticides, cleaners, and paints, buy just what you need. Give away what you don't use to someone who can use it so it never becomes a “waste”. Reuse solvents and thinners by filtering through cheese cloth or a paper coffee filter. Purchase products sold in pump-spray or wipe-on dispensers rather than aerosol spray products which may contain toxic or flammable propellants.

Substitutes for Household Products:

Furniture Polish for wood with a shiny finish: Mix three tablespoons olive oil, one tablespoon vinegar with one quart warm water in a spray bottle. Warm gently before spraying or wiping on. After applying, rub dry with a soft cloth.

Furniture Polish for unfinished wood: Mix mineral oil with a small amount of lemon oil in a spray bottle. After applying, rub dry with a soft cloth.

Waterless hand cleaner for grease, sap, and oil-based paints: Baby oil or mineral oil, butter, or margarine.

Window cleaner: One-half cup white vinegar diluted in one gallon water. Wipe windows with old newspapers. This vinegar mixture also works for cleaning kitchen and bathroom surfaces.



Toilet bowl cleaner: Use a paste of baking soda or Borax mixed with lemon juice. Scrub with brush. Let stand two hours before scrubbing to remove stains.

Fabric Softener: Add two ounces or less of baking soda to the wash cycle or the same amount of vinegar to the rinse cycle.

Oven Cleaner: Baking soda and water paste is a good oven cleaner and is useful for baked-on crud on dishes, especially if you let it sit

overnight.

Bleach: Various hydrogen peroxide bleaches on the market reduce the need for chlorine bleach.

Recommended books: “Better Basics for the Home, Simple Solutions for Less Toxic Living” ISBN 0-609-80325-5 Full of good recipes.

“The Naturally Clean Home- Over 100 Safe and Easy Herbal Formulas for Nontoxic Cleaners” - by Karyn Siegel-Maier 1999 ISBN 1-58017-194-X Available at the Homer Public Library 648.5 SIE

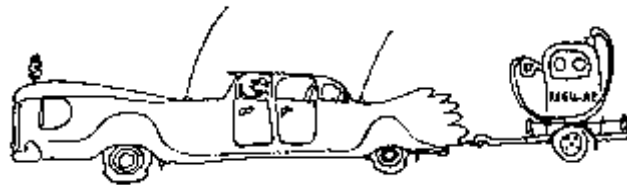
“Living Green - A Practical Guide to Simple Sustainability” by Greg Horn -2006 ISBN 978-1-893910-47-8

“Drop-Dead Gorgeous” Protecting oneself from the Hidden Dangers of Cosmetics” by Kim Erickson. 2002. ISBN 0-658-01793-4

PROMOTING SUSTAINABLE ENERGY USE

TRANSPORTATION

Hybrid Cars - There are several hybrid cars in the Homer area including Toyota Prius, Honda Civic and Honda Insight. Rich and Peggy Kleinleder report getting 38-45 mpg in the winter and 45-55 mpg in summer with their 2004 Honda Civic. 235-8702. Dan Lush is willing to share his experience with his Prius. 235-6611.

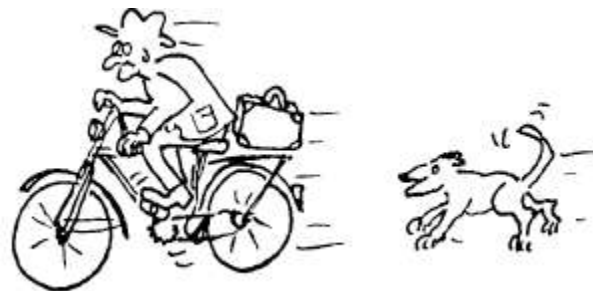


Inflating Tires - Keeping tires fully inflated saves gas. Check them frequently.

Public Radio Station KBBI AM 890 offers “Ridelines” as part of Bushlines and Information Lines, a free service. To offer or request a ride locally or anywhere to/from Anchorage and beyond, call 235-7721 and dial extension 29. Ridelines will be read on air by staff until the date you request weekdays at 8:59am and 7pm, and on weekends at 10 am and 7pm. A third daily reading of bushlines and time sensitive information lines is at 1:00pm. Most people requesting a ride offer help with expenses. www.kbbi.org

Bus Lines - The Stage Line transports passengers and parcels between Homer, Soldotna, Seward and Anchorage. 235-2252.

Trails - CoHOSTs - Coalition for Homer Open Space and Trails formed in 2005 as an informal group of trail users, landowners, and recreational enthusiasts who are seeking to unify the different trail interests in our area. Mission Statement: “To plan, develop, promote and maintain trails and open space in the Homer area”. A four-stroke snow machine which triples or quadruples gas mileage from the old two stroke is now in use by the Nordic Ski Club for grooming trails. Contact Dave Brann, 235-6018



**FIVE STAR PLUS BUILDING:
The state of the art in energy efficient building**

Ted Veal, a member of The Energy Conservatory, is a Five Star Plus builder, certified through Alaska Housing Finance Corporation (AHFC) as an Energy Rater for qualification for potential reductions in one's mortgage payment amount and to qualify for the new 2008 legislation, The Home Energy Conservation and Weatherization Program administered through AHFC. Ted also performs Blower Door Tests and is certified to do ventilation compliance. He recommends consulting with him about energy efficiency during planning stage prior to construction. He can also help with retrofits. 235-7461. tveal@xyz.net

Paul Carter is another of several local Five Star Plus builders some of whom also install Heat Recovery Ventilators (HRVs) which exchange the indoor air to remove pollutants or excess water vapor while keeping 60% or more of the heat from being lost. HRVs are an important component of superinsulated homes as are low-emissivity (Low-E) coatings on glazing or glass which control heat transfer through the windows. Paul has built R-32 insulation rated houses including installation of special low emissivity glazing. 235-6796.

George Matz has constructed a new log home incorporating some very innovative energy saving features. To reduce heat loss, the north side uses insulating styrofoam panels with half-log siding on the outside to retain the log effect. He has included a locally installed humidistat-controlled ventilation system that reduces heat loss and stratification. Most amazingly, Matz is heating his home by means of an inexpensive radiant-heated floor utilizing only a propane fired water heater with wood heat backup. Water consumption is reduced with low-flow appliances and a rain/snow catchment system. He would like to install active solar collectors on the home's south wall which receives full sunlight to provide additional heat to this circulating system. His intention is to approach zero-net energy use in his new home which was featured in the Spring 2006 edition of the Alaska Building Science News. Contact George Matz at 235-9344.

RESOURCE EFFICIENT HOUSING

Energy Saving Suggestions from Homer Electric Association and other sources.

* Replace incandescent light bulbs with compact fluorescent lights (CFL) which use 75% less electricity but give the same illumination as equivalent incandescents and last up to 10 times longer. There is one that has been in continuous use in Homer for 17 years. CFLs are readily available at all larger Homer grocery and hardware stores. Burned out CFLs must be disposed of as hazardous material on a HazMat collection day at Homer Baling Facility.

* Plug all electronic devices such as TVs, computers and peripherals, CD and DVD players, radios, cell phone chargers, etc. into power strips or surge protectors, then turn them off when not in immediate use. These and other electronics such as microwaves continue to use a surprisingly large amount of power when on "sleep" or standby modes.

* Get a home energy audit which can show you possible ways of



reducing your energy use with such simple steps as weather stripping or sealing areas of cold air infiltration. Even tiny air leaks can add up to significant heat loss.



- * Install timers on home space and water heater thermostats to raise and lower temperatures during the day, turn off lights when not in use, unplug seldom used refrigerators and freezers, also clocks in seldom used rooms. Keep dryer filters free of lint and refrigerators from running too cold.

- * Install low-emissivity Energy Star rated window glazing or glass which works by allowing infrared radiation into the house, but reflecting it back into the room rather than allowing it to reradiate back out the window like conventional glass. In cold climates, the coating should be located on the outside of the inner pane.

ENERGY CREDITS

HEA has a Line of Credit Program to assist qualified members with purchase of approved electrical, plumbing appliances, and other eligible items from qualified vendors. HEA also has a handout that helps members determine where their power is used in order to know how to conserve energy by identifying problem areas. Ranges, stoves, and water heaters generally appear to be the highest users of energy. The handout also contains 20 useful tips on how to lower one's electric utility bill. Homer HEA office 235-8551 toll free (800) 478-8551 www.homerelectric.com for the useful Home Energy Savings Guide.

ALTERNATE BUILDING MATERIALS

Straw Bale Houses

Dale Banks has a 16' by 24' addition on his house made of locally grown hay bales 18" in width. The inside of the addition is covered with 1 1/2 " of natural clay plaster. Insulation value of the addition is estimated at R 30. He has also built a straw bale warehouse with solar collectors on the south side. Dale Banks 235-5100.

Lasse Holmes built an approximately 1,000 sq. ft. timber frame house using bales of timothy hay straw grown in Kasilof for insulation. He also used a mixture of wood chips from a local source mixed with a light clay slip as insulation in some of the walls.

kayak@xyz.net

RENEWABLE SOURCES

Solar, Wind, and Small Hydro Systems.

Solar energy can be harnessed in three main ways:

1. **Passive solar energy** is the collection of the sun's rays by the entire structure itself. Before building, carefully assess the lot to site the house away from trees and other structures that shade the south windows especially in the winter. Retain other trees as windbreaks. Design the house so that its broad side faces south. Design overhangs to permit maximum winter insolation but to shield rooms from the sun's midsummer rays.

A well-insulated and weather-stripped home or business with low emissivity windows can be sited and built with the majority of windows facing south and few if any on the north side. External window shutters that can be easily lowered to contain heat gathered during the day are very important but present a design challenge. Internal shutters accumulate harmful condensation on windows and frames. Many homes and commercial structures in Homer have at least some passive solar features.

2. **Solar panels** - Photovoltaic cells turn the sun's energy directly into electricity which can feed into the house's existing electrical system. As most renewables are intermittent sources, the electricity generated must be stored in large lead-based batteries or used to heat water if not needed immediately. Also, if the house has significant power requirements, an onsite generator may be necessary to produce back-up power during the winter months and long periods of overcast skies.

Solar panels have worked very well in the Homer area and are becoming even more popular. The downside is the initial installation cost and the eventual need to dispose of worn-out storage batteries as well as the need to burn fuel to run generators. However pay back periods are shortening as the technology improves and the cost of Kilowatt hours increases.

Solar Panels used in the Homer area range from a small single panel and one deep cycle battery providing enough power for a very small seasonally used cabin, to other remote cabins with lights, water pump and other uses, to homes with greater demand for power needing the supplement of a generator. There are also two examples of large freestanding sun-seeking solar panel arrays in town, one on Homer Spit at Coal Point and another at the Kachemak Conservation Center off Ben Walters Lane.

3. **Active Solar Systems** - Heating water for home or commercial use can be done utilizing an active solar system, usually a flat plate collector or evacuated tubes installed on south-facing surfaces. The sun's direct rays heat water or another liquid with a lower freezing point circulated by pumps or fans in dark-colored tubes. This heated liquid then directly contacts other abutting pipes containing water and transfers warmth to the indoor pipe contents for space heating or hot water use. The heat can also be saved in storage tanks and distributed from there. Active solar heating technology is less frequently encountered in Alaska though it's a very efficient means of harvesting the sun's energy.

Wind, hydro and other renewables are currently less commonly found in the Homer area. There are individuals in Homer who are interested in promoting micro tidal energy generators, both floating and/or helical models. There is a new geothermal installation at Chena Hot Springs Resort though none is known to exist closer to Homer

RENEWABLE SYSTEMS INSTALLERS & CONSULTANTS

Dave Mogar, consultant and installer of Renewable Systems and **Joe Whitteberry**, licensed electrician and renewables consultant are two of several Homer area electricians who are dedicated to installing solar, wind and small hydro systems with generator back-up, making them function properly and maintaining them. In addition to terrestrial on and off-grid systems. Dave has also installed several wind generators on boats to keep the batteries topped off. Dave Mogar 235-5979 or cell 399-1625. Joe Whitteberry 235-4700.

Brian Hirsch is Renewable Energy & Conservation Program Manager of the Yukon River Inter-Tribal Watershed Council, a coalition of 66 Tribes and First Nations in Alaska and Canada. Brian, a member of the HEA Board of Directors, has been working with Indian Tribes and First Nations throughout North America for seventeen years on renewable energy and conservation, clean water, land management, and community development initiatives, primarily around the Great Lakes region, Alaska, and the Yukon and Northwest Territories in Canada. 235-6842, hirsch@alaska.net

LIVING OFF THE GRID

Several people in the Homer area live off the grid. Two examples are: **Sadie Cove Wilderness Lodge** has for 20 years used a Pelton wheel (small hydro) placed in a stream nearby. The Pelton wheel charges a bank of batteries connected to a power inverter which transforms the current from 12 volts to 110 volts. Added to the Pelton wheel is a wind generator that kicks in if and when the batteries get low. Thus there are two sources of power for the lodge, one running 24/7 noiselessly. Sadie Cove Wilderness Lodge has received numerous awards for their use of renewable energy and for their recycling efforts. www.sadiecove.com

Betty Jo Goddard has lived at about 1300' elevation off North Fork Road since 1995. She has two different rated wind turbines mounted 30' and 100' high. Additionally she has a large solar panel array with a tracker which rotates to follow the sun. Electricity generated by these sources is conducted to a battery bank in a nearby shed where an inverter converts the current into AC for use in her home furnished with typical appliances. In the unlikely event that these are not sufficient to keep the batteries charged, Betty Jo has a back-up propane generator. Current generated above and beyond what the batteries produce can be converted to heat and utilized in that manner. bjogod@ptialaska.net

USEFUL WEB SITES AND SOURCES

Alaska Housing Finance Corporation www.ahfc.state.ak.us is probably the very best most useful web site. Information can be found about the newly passed 2008 **Home Energy Conservation and Weatherization Program (SB 289)** through which \$300 million has been made available administered by AHFC for weatherization and energy rebate programs. The funding will help Alaskans reduce their energy bills by making energy-efficient improvements to their homes. Alaskans who meet income requirements would be eligible for free weatherization, while others may participate in the home energy rebate program. AHFC is currently in the final stages of program design and will keep their web site updated as more information is available. There is also a great deal of additional information of use to the home owner available on the AHFC web site. Be sure and check it out or call as these programs are being administered on a first come first serve basis. 1-877-325-2508.

Alaska Building Science Network provides classes, an online resource center for building research, fact sheets for download, links, and a green building products directory intended for the building community at large, and all Alaskans who are dealing with the rising cost of energy. www.absn.com

Energy Star is a government backed program helping businesses and individuals protect the environment through superior energy efficiency. Check this web site out if you're thinking of building a new home, purchasing a new appliance or lighting, heating, and more. Look for the Energy Star label. You can search for local, statewide, online and mail order sources. www.energystar.gov

UAF Cooperative Extension Service mission: "To objectively bring the best possible housing technology information to Alaskan home owners and builders". Rich Seifert - CES Energy and Housing Specialist ffrds@uaf.edu or www.uaf.edu/ces/faculty/seifert 907-474-7201. Rich has conducted workshops on solar technology in Soldotna and Homer. See also www.alaskasun.org

Alaska Center for Appropriate Technology - Promoting research and education for Alaskans in sustainable economic development.
P. O. Box 872020, Wasilla, AK 99687 www.acat.org 907-373-0909

Interstate Renewable Energy Council's online Database of State Incentives for Renewable Energy lists financial incentives offered by Federal and Alaska agencies and utilities. www.dsireusa.org

Home Power Magazine -
www.homepower.com

Building Green- subscription-based online resource for environmentally sensitive design and construction. www.buildinggreen.com

Sources of Renewable Energy components -
Susitna Energy Systems - 2507 Fairbanks St.
Anchorage, AK 99503 Toll free 877-485-1100

ABS Alaskan - Alternative Energy &
Remote Power Products -Anchorage, (907)562-
4949 fax:(907)563-4900 www.absak.com



Backwoods Solar Electric Systems, a catalog sales business serving homes so remote that access to utility lines is not practical. www.backwoodssolar.com

RECYCLING

LOCATIONS

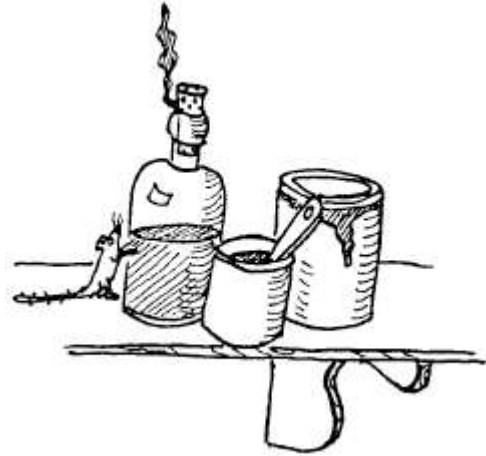
The Homer Baling Facility located on the Sterling Highway at the top of Baycrest recycles newspapers, corrugated cardboard, office paper, phone books, aluminum cans, and glass which is crushed on site and used to surface roads around the Baling Facility. HDPE # 1 and 2 plastic containers, motor oil, all batteries including household, auto and cell phone batteries but not the phone itself, are also recycled. **Cell phones** - **Ulmers** has a small box to recycle old cell phones by the store's front doors. They may also be taken to **Fritz Creek General Store**.

Cook InletKeeper also recycles cell phones at its office in the Kachemak Conservation Building, 3734 Ben Walters Ln., Homer. Call 235-4068 for information. Cell phones contain valuable recyclable components; the phones also contain components that, if dumped in a landfill, are potentially harmful.

Junk vehicles brought to the Homer Baling Facility are shipped to Anchorage Recycling Center once a year and from there, sent to Seattle for recycling.

Hazardous Materials including burned out CFL light bulbs may be disposed of every 2 or 3 months during a HazMat collection day. 235-6678 for information.

The McNeil Canyon Transfer Station located at the intersection of Old East Rd. and New East Rd. beyond McNeil Canyon Elementary School has dumpsters for recycling container glass, corrugated cardboard, aluminum cans and newspapers.



Recycle dumpsters for aluminum cans, container glass, corrugated cardboard, and newspapers are located on the south side of the **Save-U-More Parking lot**.

Safeway accepts clean plastic shopping bags to be recycled and provides a receptacle located inside near the front of the store. **Clothing drop containers** sponsored by **Pride** and **Big Brothers & Big Sisters** are located in the Safeway parking lot. Another Big Brothers & Big Sisters clothing box container is located at the south end of the **Lakeside Mall parking lot**.

Tech Connect on Pioneer Ave. collects **used printer cartridges** which are then taken to McNeil Canyon School where students box them up and mail them Outside to a facility that pays the school for the used cartridges. These funds are used to support school programs. 235-5248.

Obsolete Eye Glasses can be turned in at Dr. Sitenga's and Dr. Walker's offices as well as to Scruggs on Ocean Drive. The glasses are taken to the Kachemak Bay Lions where they are packaged, sent to Anchorage then finally to Seattle where they are examined and sorted by prescription for reuse in foreign countries. Between 300 and 400 glasses are collected yearly in the Homer area. For information, contact Gus VanDyke at 235-1999 or gusvandyke@yahoo.com

ORGANIZATIONS THAT RECYCLE

Alaska Islands and Ocean Visitor Center has a state-of-the-art recycling center for use by the staff and volunteers. Its guide lists and describes the many materials that can be collected in a variety of containers located at the recycling center apart from the visitors' area. A smaller recycling station is available by the rest rooms in the visitor's area. The Center diverts over 80% (assessed by weight) of its solid waste from the Homer Landfill. Contact Dan Thorington at 235-4670.

An Electronics Recycling event now takes place in Homer each spring and has proved highly successful in collecting and trucking electronics to Anchorage to be shipped Outside for recycling. See Total Reclaim Inc. Environmental Services below.

RECYCLING BUSINESSES

Loopy Lupine distributes recycled, unbleached, chlorine free, biodegradable, and environmentally responsible products especially for food service and janitorial use to stores in Homer and other Alaskan towns. www.loopylupine.com 235-5100.

Total Reclaim Inc. Environmental Services at 12101 Industry Way, Unit #C4 Anchorage, AK 99515 accepts computers for recycling for a fee, then ships them to Seattle where they are crushed and separated into component parts. Precious and non-precious metals, leaded glass, plastics, circuit boards, motors, and more are separated and recovered. Toxics are disposed of safely rather than contaminating landfills. For information contact 907-561-0544, or www.totalreclaim.com.

ART AND CRAFTS MADE FROM RECYCLED MATERIALS

Homer's creative and resourceful artists often reclaim "found objects" and recycled elements by using these items in their work.

BIOFUELS

Used cooking oil, locally produced, filtered and with water removed, can be used in place of diesel, but significant engine modifications are needed. During cold weather, diesel oil must first be used to start the engine, switching over to the veggie oil when the engine is warm. The advantage of this method is that once engine modifications are completed, the readily made veggie fuel can be easily used.

Biodiesel. Vegetable oil can be chemically processed to produce a more refined oil, with glycerin as a byproduct. This processed oil requires relatively minor engine modifications and can be used directly in the vehicle. The disadvantage is that new fuel must always be processed before using. In January 2006 there were at least four people in the Homer area producing and using one or the other above biofuels. Contact Dale Banks 299-0524.

REUSING, REPAIRING and REFUSING

REUSING

Garage Sales - One of Homer's most favorite sports is visiting these neighborhood sources of absolutely anything from A to Z.

Apart from the obvious reuse of **library books**, there are many ways that one can reuse an item. One can donate old books to the library's book sale. For infrequent uses, it is far more cost effective to **rent tools** rather than to buy. There are several second hand and consignment stores in the Homer area that sell **used clothing and house wares**, also **used books and CDs**.

Yogurt and glass containers up to 1 quart can be donated to the Homer Community food Bank for reuse. Donations to thrift shops that are sponsored by charities can be tax deductible. Both actions help complete the loop of user-buyer, conserve resources, and help keep items out of the waste stream.

Homer Brewing Company reuses growlers, also will pay \$.50 for 20 oz. used Sobe beverage bottles that have all labels, adhesive and metal neck ring completely removed. “Desolvit” can remove the adhesive. Call first to see if they are buying. Karen Berger and Steve McCasland. 235- 3626.

REPAIRING

Give that Subaru a ninth life, reupholster that chair, seam seal that leaky tent, mend those jeans, fix that antique foot-treadle sewing machine! Have fun, be creative, reduce impact on the waste stream.

REFUSING

Just say no to purchasing items you really don’t need or want.



OTHER MEANS OF PROMOTING SUSTAINABILITY

EDUCATION AND ENVIRONMENTAL ORGANIZATIONS

The Center for Alaskan Coastal Studies’ mission is “to foster responsible interactions with our natural surroundings and to generate knowledge of the marine and coastal ecosystems of Kachemak Bay through environmental education and research programs.” The Coast Walk, a yearly survey of Kachemak Bay beaches, begins with a kickoff event in early September and runs to the end of the month. It includes the annual beach clean up in conjunction with the Ocean Conservancy and the International Coastal Cleanup with data cards to record types of trash. 235-6667 www.akcoastalstudies.org

Homer Alaska Youth for Environmental Action

AYEA Mission Statement: “To inspire, educate, and take action on environmental issues facing our communities.” Homer Alaska Youth for Environmental Action (HAYEA) is a part of the National Wildlife Federation’s Alaska Youth for Environmental Action network (AYEA), sponsored by the Kachemak Bay Conservation Society and Homer High School. Contacts: Nina Faust 235-6262 or Francie Roberts 235-1068.

Kachemak Bay Conservation Society is concerned with protecting Kachemak Bay and the Kenai Peninsula. The organization concentrates on logging, oil and gas leases, herbicides and wildlife issues. The Society monitors environmental issues locally and statewide and keeps its members informed through a periodic newsletter.

3734 Ben Walters Lane, Suite 202, Homer, AK 99603

Phone: 907-235-2062, 235-8214

Kachemak Bay Research Reserve’s Mission Statement “To develop and implement research and educational programs that enhance our understanding and appreciation of natural and human processes occurring in Lower Cook Inlet and Kachemak Bay to ensure that these estuarine ecosystems remain healthy & productive.” www.kbayrr.org

Kachemak Heritage Land Trust “preserves, for public benefit, land on the Kenai Peninsula with significant natural, recreational, or cultural values by working with willing landowners.” 235-5263 www.kachemaklandtrust.org

Cook InletKeeper “is a citizen-based, nonprofit group dedicated to protecting Alaska’s Cook Inlet Watershed and the life it sustains.”

Lower Inlet Office (Headquarters) PO Box 3269 / 3734 Ben Walters Lane, Homer, Alaska
99603 tel. 907-235-4068 fax 907-235-4069 www.inletkeeper.org

The Cook Inlet Alliance promotes the responsible use and management of public resources that may be impacted by mining and related industrialization.
cookinletalliance.org

Alaska Marine Conservation Council works to help protect the long-term health of Alaska's oceans, conserve wild fisheries, and sustain Alaska's unique coastal ways of life.
amcc@akmarine.org, local contact Alan Parks 235-3826.

Kachemak Bay Environmental Education Alliance (KBEEA) Welcomes Teachers:
"We invite K - 12 teachers, educators, and administrators whose classes are likely to participate in environmental or coastal science education in the Kachemak Bay area to use this web site as a planning and reservation tool prior to visiting our region. We look forward to hosting you and your students in our coastal communities." Check out www.homerfieldtrips.com. Contact KBEEA at kbeea@homerfieldtrips.com

SOCIALLY RESPONSIBLE INVESTING

An increasing number of money market funds, mutual funds, and other products have been established with a variety of environmental and other screens for those who wish to invest in ways that support their values. Looking online for Socially Responsible Investing yields much information. A sample list of socially responsible products with environmental and sustainability screens follows:

Ariel Fund
Calvert Group
Citizens Trust
Domini Socially Responsible
Dreyfus Third Century
New Alternatives Fund
Neuberger Berman Socially Responsive Fund
Parnassus Fund
Pax World Fund
Winslow Green Growth



