

Hello Stewards of the Earth,

As a friend of mine recently put into words, we have taken yet another intrepid trip around the sun, all the while, producing more CO<sub>2</sub> than we ever have before, consuming more fossil fuels than we ever have before, seen more Arctic ice disappear than we ever have before, along with continuing to salt our once fertile fields, contaminate our rivers, aquifers, and oceans, and destroy habitats and species in every bioregion around the world. On the other hand, one could say we have done more to build awareness about climate change, fossil fuel depletion (and dependence), air, water, and soil pollution, habitat destruction and species extinction than we ever have before. We can certainly say the message is clear - we are heading in a direction few of us would like to go. While there is debate about the possible extinction of our own species, we can look to the building of our awareness, education, and action to empower us to become resilient stewards rather than helpless victims. We can choose to look at the trees and branches taken down by recent storms with despair or we can see those trees and branches (logs) as mediums for mushroom spawn inoculation, and excess organic matter as mulch and abundant soil nutrients. In a way, storms that surge through an ecosystem, much like fires, can be purging, cleansing, purifying, and regenerating, making for a more cohesive, productive, and biodiverse environment afterwards. January is a perfect month for us to follow suit, taking in our surroundings; our place, in our homes, occupations, communities, and cultures and purging out that which is not sustaining, cooperative, and equitable. It could take the form of a internal body cleanse like the Lemonade Fast, which as an astringent, squeezes out toxins from deep tissues and vital organs, while purifying the blood and providing mental clarity. It may take the form of clearing out our physical enclosures of unused household items to donate or giveaway, or bring our hazardous chemicals to [Sunset Scavenger Household Hazardous Waste](#) drop off, relying on natural cleansers like baking soda, vinegar, and borax. It could take the form of expanding our awareness through recent films such as [What A Way To Go](#), [The 11th Hour](#), or the online flash film, [The Story of Stuff](#). It could take the form of a commitment to use less energy, less water, less "convenience," and less luxuries. The important thing is to do *something different* this year. Do something new, courageous, thoughtful, radical. Collectively commit with friends, family, neighbors, and acquaintances to stand for something, volunteer, take charge, vision, plan, and see it through, make it happen, make a paradigm shift and become the stewards we are intended to be. Many of you are already doing this. Can you tweak it? Can you do more? Can you cooperate with others that you haven't interacted with yet? These are the thoughts we are reflecting on as we embark on another year of commitment to San Francisco's inhabitants (flagellated microscopic organisms to many-legged, and all in between), land-base, infrastructure, and social fabric. This year, with your help, we want to weave the frayed ends of our City's tapestry into a regenerative and nourishing ecosystem that supports and invigorates all who inhabit it.

## **NATURE AWARENESS**

There is much to do and see this time of year if you can brave the chill and rain. Our landscape is alive with the swelling of flower buds from fruit trees that have been dormant, and flowers that have begun to open, like the deciduous, Magnolia cambellii,

which is flowering right now in our [SF Botanical Gardens](#) along with 300 other species including *M. dawsoniana*, *Ribes speciosum* and *R. sanguinum*, and the beautiful South African Erica's. This is the time of year the Snowy Plover, Spotted Sandpiper, Grebes, Teals, and countless other birds begin to breed or begin their spring migration. Roosevelt, and Tule Elk and Black-tailed Deer begin to lose their antlers, while Coyote, and Gray Fox begin breeding as well. While the California Sea Lion feeds on spawning Pacific Herring (that which survived the Cosco-Busan oil spill), the Pacific Gray Whale's southern migration peaks, while the Northern Elephant Seal's birthing period peaks with 75lb. pups along the shores of Point Reyes, Ano Nuevo, and the Farallones. The male Western Spadefoot Frog calls from vernal pools around the Bay Area, while California and Rough-skinned Newts migrate to water replenished by our recent rains, and Coho, Chinook & Chum Salmon spawn in our streams, while Steelhead migrate. All this and more, buzzing around you. Have you heard what the GGNRA has cooked up? The 2008 Golden Gate National Recreation Area Endangered Species Big Year is a race against time to observe each of the 33 endangered and threatened species found within the Golden Gate National Recreation Area, while taking 33 discrete conservation recovery actions that will prevent these species from going extinct. It is a competitive event: the person who sees and helps the most species between January 1, 2008 and December 31, 2008, will win the Big Year. We don't think it should be about winning, and if anything, the prize should be we all get a more biodiverse and healthy ecosystem to share with others. That being said, it's a great opportunity to learn, act, and take part in something that could have a tipping point for some endangered species in our area. To learn more, check out their [website](#).

## **WHAT WE'VE BEEN UP TO**

It has been a fruitful year for us and the work we have been doing in San Francisco. We have transformed many backyards into edible and native landscapes, created educational, organic gardens in three elementary schools, assisted with the planting of edible and medicinal native species from several bioregions of California to replace our concrete sidewalks, created community building opportunities in a supportive housing facility, developed educational tools for schools and residents, and promoted the imperative vitality of a localized economy that focuses on the needs of the people, and not corporate interests. Some projects have been more fruitful than others, but after taking the time to meditate and evaluate each one individually, we have come away with a plan to sink our roots deeper, absorb the nutrients around us, and flourish even more this year, improving what we are already doing through more cooperation and planning. We recently took a trip to Big Sur for our 2007 Annual Meeting and to improve on our vision and action plan for 2008. Check out our story with details and photos about the Monarch butterflies we saw, and much more [here](#). Our renewed and revised vision for the Ecology Center of San Francisco will be available in February for your viewing. Check out the following pages to see photos and descriptions of some of the work we've been up to: [School Gardens](#), [Lending Library](#), [Workshops](#), as well as some of our recent postings to various categories on our homepage.

## **UPCOMING AND ONGOING**

Jan. 26th, Saturday - 12pm-4pm : Backyard Bounty Brigade - Carmen Aguilar's backyard rejuvenation project : 4731 Irving St. (btwn. 48th and LaPlaya)

Come learn about sheet mulching, native plants for wildlife and medicine, and planting a winter/spring vegetable bed. We will be setting up a new irrigation system, sheet mulching most of the backyard space to prevent invasive plants from taking over, and creating a native wildlife garden specifically with shrubs, herbs, and other elements to attract birds, bees, butterflies, and more. We'll also be putting in a winter vegetable bed complete with our favorite brassicas (Broccoli, Cauliflower, Kale, and Cabbage), as well as some garlic and other medicinal herbs. Lend a hand, learn a skill, or bring some wisdom and expertise of your own for this community building Garden Party! We will provide all necessary tools as well as some organic and local snacks and refreshments. Call/Email for more details.

Jan. 28th, Monday - 1pm-3pm : Cob Bench Building with 4th & 5th graders from Jefferson Elementary School : 1725 Irving St (btwn. 19th and 18th avenues)

We'll be continuing our cob bench project we started a month ago at Jefferson Elementary School in an effort to bring ecological awareness, education, and action to the students of Jefferson. They learned about why we are building a bench out of earth as opposed to wood, concrete, or plastic, and they're helping to build it as a legacy to the kindergarteners who will be using it. Come lend a hand, and a foot as we mix batches of clay, aggregate, and straw to a sublime stickiness to apply to our existing foundation. Share experiences or wisdom with some of the students, or just observe and learn about natural building and its potential in San Francisco. You may get dirty, so plan ahead if you would like to stomp the cob with your bare feet. Ideally, the sun will be warming the air around us and the rain will pause for a day, if not, this event will most likely be canceled. Please call ahead for details or confirmation (415) 846-8164. This event is on-going, so if you can't make it this Monday, check back for future days (typically Monday or Wednesday).

## **BOOK OF THE MONTH**

This month's selection from our Lending Library is Joseph Jenkin's The Humanure Handbook, an informative and amusing discussion on how composting our "undigested leftovers,;" could save the world, or at least recycle currently wasted soil nutrients while improving soil fertility and reducing soil and water pollution, while saving millions of gallons of clean water daily, something that is currently done around the world, but little understood or accepted in the United States. Jenkins, who has been feeding his family from crops grown with the family's "humanure" for 26 years, explains the history, science, and practicality of composting all organic matter generated by humans in a clean, safe, and productive way. One caveat is many of the statistics of sources referenced are from the 80's and so may not apply today though they still reflect the reality experienced by many people around the world today. Though "humanure" composting is

currently not allowed in San Francisco, the proper composting of pet manures is unregulated and a simple means of replicating a basic principle of ecosystems which is to recycle nutrients through the food web. Doing so will divert a great deal of soil nutrients out of our landfills and back to the soil, allowing them to be broken down by beneficial microorganisms that convert the manures into fertile, pathogen free compost for our plants - edible and ornamental - to benefit from.

The Humanure Handbook, 3rd Edition: a guide to composting human manure by Joseph Jenkins - [Chelsea Green Publishing](#)

An edited excerpt taken from chapter two, Waste Not, Want Not...

*“WASTE: ...Spoil or destruction, done or permitted, to lands, houses, gardens, trees, or other corporeal hereditaments, by the tenant thereof...Any unlawful act or omission of duty on the part of the tenant which results in permanent injury to the inheritance...”* Black’s Law Dictionary

America is not only a land of industry and commerce, it’s also a land of consumption and waste, producing between 12 and 14 *billion* tons of waste annually. Much of our waste consists of *organic* material including food residues, municipal leaves, yard materials, agricultural residues, and human and livestock manures, all of which should be returned to the soil from which they originated. These organic materials are very valuable agriculturally, a fact well known among organic gardeners and farmers. Feces and urine are examples of natural, beneficial, organic materials excreted by the bodies of animals after completing their digestive processes. They are only “waste” when we discard them. When recycled, they are resources, and are often referred to as manures, but never as *waste*, by the people who do the recycling. We do not recycle waste. It’s a common semantic error to say that waste is, can be, or should be recycled. Resource materials are recycled, but waste is never recycled. That’s why it’s called “waste.” Waste is any material that is discarded and has no further use. We humans have been so wasteful for so long that the concept of waste elimination is foreign to us. Yet, it is an important concept.

The world is divided into two categories of people: those who shit in their drinking water supplies and those who don't. We in the western world are in the former class. We defecate into water, usually purified drinking water. After polluting the water with our excrements, we flush the polluted water "away," meaning we probably don't know where it goes, nor do we care. Every time we flush a toilet, we launch five or six gallons of polluted water out into the world.<sup>12</sup> That would be like defecating into a five-gallon office water jug and then dumping it out before anyone could drink any of it. Then doing the same thing when urinating. Then doing it everyday, numerous times, and then multiplying that by about 290 million people in the United States alone. To read the rest of this excerpt, [click here](#).

## **BIRD OF THE MONTH**

Thus far, we've only offered information about plants that we would like to highlight, but this month, and going forward we would like to improve upon this feature of our newsletter by adding other species that are an important part of the ecology of both San

Francisco, the surrounding Bay Area, and beyond. This month's selection is the [\*Pelicanus occidentalis\*](#), or Brown Pelican. Brown Pelicans, are primarily fish eaters sustaining themselves on roughly 4 pounds of a variety of fishes including menhaden, herring, sheepshead, pigfish, mullet, grass minnows, top minnows, anchovies, and silversides, and sometimes crustaceans. Being a fairly large bird, up to 4 feet long with up to a 7 foot wingspan, it needs a larger amount of food than some other seabirds, and therefore prefers, some would say *needs*, larger fish to consume. *Pelicanus* inhabits warmer coastlines all up and down North, Central, and South America on both the western and eastern coasts, but is limited to areas with cooler temperatures. Mating and breeding takes place in warm islands off the coasts of Southern California and Mexico, including the Anacapa and Coronado Islands. Specifically it remains in open ocean waters to intertidal zones and estuaries though it is not too uncommon to see them in freshwater marshes or larger bodies of water occasionally. They nest in a variety of areas including scraped holes on the ground, in rocky cliff outcroppings, and in bushes and tree tops.

Many species make up part of the food web for *Pelicanus*, including the fishes mentioned above (Striped Mullet, anchovies, menhaden, etc) but also the food sources that those fish consume including the various smaller fishes, planktons, and sea kelps such as Sugar Wrack and Sea Palms that provide up to 90% of the primary productivity for intertidal ecosystems. *Pelicanus* has no known predators though in areas around Tijuana, Mexico, humans are known to steal their eggs for consumption. That practice is illegal in the United States for many reasons, including its current status as Endangered or Threatened, depending on the jurisdiction and region *Pelicanus* inhabits around the country.

The historical range of *Pelicanus* in the United States includes the Pacific and southeastern coastal areas, as well as Central and South America, occasionally reaching up to Vancouver Island. They were wiped out of Louisiana in the early 1970s due to chemical pollutants including DDT and other pesticide residues that disrupted solid eggshell production. At the peak of their decline in California in 1971 only one bird hatched, but after the passage of a ban on DDT use by the [EPA in 1972](#), breeding success improved greatly to hatched numbers reaching 6500 and more in the mid-80s. Currently, *Pelicanus* continues to inhabit much of its historic range and can be seen expanding this range inland here and there but not for breeding. This species is unique in that it is one of the largest seabirds and certainly the largest (and only Brown) of the 7 species of *Pelicanus* worldwide. Its habitat, which is mostly ocean waters and breeding sites need to be restored to more pristine conditions free of pesticide and heavy metal residues coming from inland runoff and sewage outlets as well as development along estuaries and coastlines, to ensure long term success of the species.

*Pelicanus* is a migratory seabird, so it moves around to many different regions that have both easily maintained habitats and delicate habitats. In some regions, it feeds on certain organisms that are sensitive to warming water temperatures and an important source of food could be lost if climate change dramatically alters the temperatures of some of these regions. In addition, *Pelicanus* needs areas close to the ocean to breed and so tree tops and bushes in coastal scrub areas need to be designated wild and scenic or wildlife preserve lands so they can safely mate and fledge their offspring in these regions. *Pelicanus* is a colonizing bird that often nests within a wings distance of each other and therefore to support a population of 4,000 or more breeding pairs would require large

tracts of undeveloped or seldom used space at least during their breeding season of late summer.

The most important aspect of habitat restoration for *Pelicanus occidentalis* is the necessity to reduce our toxic chemical and heavy metal use in industry manufacturing, processing, agriculture, and sewage treatment as these elements are the most destructive to their environment and their effluent and pollutants are systemic throughout the food chain. While some measures have been proposed such as the banning of various chemicals like DDT, and moving sewage outlets farther out to sea, problems still arise with the use of other chemicals not yet banned, the use of chemicals that contain trace amounts of DDT which are still used, legal use of DDT and similar chemicals in Mexico, and illegal use here in the US. Concentrations are found in many species still today that are above the [National Academy of Sciences safe limits](#), and while moving sewage outlets farther away from intertidal communities and areas of high biodiversity, the problem is not solved or mitigated just moved to another region that is now in danger of further human disruption and continued exploitation without regards to ecological needs and balance. Did I mention humanure composting as opposed to central sewage systems? If you didn't know already, the effluent from San Francisco's sewage system goes right into the ocean and the Bay. The term effluent is used because the liquid, while being as clear as water, contains enough harmful materials that it is unsafe for human consumption. If it is unsafe for human consumption, why are we dumping it in the ocean and the bay? Stay tuned for more on this to come.

## RECIPE OF THE MONTH

Well besides all of the lovely winter vegetables you could be enjoying this month, and savory ways to prepare them, we though we'd offer the recipe for a simple liver flush, and a recipe for the "Lemonade Fast," based on the small book by Stanley Burroughs's [The Master Cleanser Book](#). If you are intersted in a cleansing or purging fast, it can be a wonderful, educational experience, but you have to be prepared, mentally and "logistically." The ideal lemonade diet would last for 10 days, or at least 5-7, because after three days, your body has eliminated everything in your digestive system and can work on cleaning out anything that might have been left behind or built up over the years. In addition, it gives your digestive organs a time to rest, since most of the time they're working nearly round the clock. You'll want to ease into and out of the diet with only whole foods, especially raw fruits and vegetables. That being said, you will have very little energy compared to what you're used to and it is advisable to not do any major activities during the fast. It is also important to note that the special blend is actually everything the body needs to survive. For more details on this, please check out [www.thelemonadediet.com](http://www.thelemonadediet.com). While the lemonade fast is something you could or should do up to four times per year, the liver flush is something you can do anytime and will always be healthy as a routine maintenance for your liver's health. It is actually part of a most complex diet based on [Dr. Randolph Stone's](#) Polarity System and it's purifying diet. This recipe has been taken from The Holistic Health Handbook, which is also in our [Lending Library](#).

Liver Flush:

2 tablespoons *cold-pressed oil* (preferably olive or almond)  
Juice of 1 large or 2 small lemons  
Juice of 1 or 2 oranges (or 1 grapefruit)  
1 to 4 cloves of garlic (if this is too strong, garlic can be eaten in a luncheon salad)  
Dash of cayenne pepper

Blend the garlic and oil in a blender (or mince the garlic thoroughly and mix with oil), then add the other ingredients and briefly blend or mix well. After drinking this mixture down, follow immediately with two cups of *herbal* (not black) tea, or hot water if tea is not available.

*Suggested Herbal Tea Blend:* Boil about half a finger of fresh ginger root, sliced into six or seven pieces, with a tablespoon each of fenugreek, fennel seed, and flax seed for three minutes at a slow boil, and pour the broth into a teapot containing comfrey leaf and peppermint leaf teas (about one tablespoon of each). Makes about one pint.

If you can, you should try to eat only raw or well cooked, and thoroughly masticated fruits and vegetables while excluding any dairy, grains, meat, coffee, alcohol, eggs, sugars, starches, or black tea. You can do the liver flush for a couple days or up to two weeks. Ideally a period of 3 to 5 days in between a two week period would consist of just liquids only.

#### Lemonade Fast:

Combine 2 tbsp. of fresh lemon or lime juice, 1 or 2 tbsp. of organic maple syrup and some cayenne pepper (as your taste allows), per 1 c. of pure water.  
Drink a minimum of six cups of this mixture a day for a minimum of 10 days. Eat no solid foods. You may drink herbal teas and water as well.

Keep your bowels moving with laxative teas in the morning and evening to help your body eliminate the toxins accumulating in your colon as the lemonade cleans your entire system. Taking enemas on the last few days is also highly recommended for clearing out your colon.

Break your fast by drinking orange juice for two days to prepare your stomach to assimilate other foods. On the third day, drink orange juice in the morning, raw fruit for lunch, and fruits and salad for dinner. Resume normal, healthy eating on the next day.

### **TILL NEXT MONTH**

Remembering that there are so many beautiful creatures and happenings all around us everyday, all day is what makes being alive such a gift. We often get caught up in our day to day struggle, through its ups and downs and forget about taken moments to slow down, stop, smell the roses, or just observe what is around us, speaking to us in a language older than words. We want to leave you with those thoughts, and ten ways you can enjoy natural sounds around you next time you take a moment for yourself. Share this with friends, family, and others:

1. Sound Sense - Stop. Listen to what's around you. Now close your eyes. Do you hear other sounds? Do you hear more with your eyes close?
2. Sound Count - Close your eyes. Lift up a finger for each sound you hear. Use your left hand for natural sounds and your right hand for human-made sounds. Which time of sound reaches five first?
3. Sound Walk - Walk and listen. Do you hear your footsteps? Do you hear your clothes rustle? Can you walk without making any sound?
4. Sound Draw - Take a moment to hear one sound around you. Use your finger to draw the sound in the air. Have a friend guess the sound.
5. Sound Pleasure - What is the most beautiful sound you hear? What is the ugliest?
6. Wind Blown - Try to hear the wind's sound blowing through different plants.
7. Water Sounds - Find a stream or waterfall and listen carefully with your eyes shut until the sound separates into single notes.
8. Landscape Listening - How does the shape of the land affect the way sound travels to your ear? Where is the source of each sound? Are there any echoes? What is the closest sound you hear?
9. Walk in the Wind - Walk as though a predator was after you. Walk as though you were a predator.
10. Animal Chat - Listen for an animal. What sound does the animal make? Can you make its sound? Can you communicate with the animal?

This list was compiled by the [Nature Sounds Society](#) to encourage the preservation, appreciation, and creative use of natural sounds. I hope you enjoy that and other ecological opportunities coming your way. Until next month, keep warm, go at least a day without any electricity, and keep planting winter veggies like broccoli, kale, cauliflower, cabbage, spinach, and mustard greens for some yummy, nutritious meals in the spring.

Davin, Sam, and Tori  
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