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JUNE 1990 ©



As the human population of the earth edges towards 6 BILLION, our communities and attending infrastructures (highways, dams, corporate monocultural "farms") are speeding the extinctions of many species of birds, mammals, amphibians, reptiles and fish by robbing them of places to live and something to eat. Since human reproductive responsibility seems a long way off, each of us can take steps to make our home landscapes and family farms into wildlife refuges. How? Shallow pools of water made by setting the tops of cement birdbaths on the ground not only will quench the thirsts of birds but provide havens for frogs and salamanders who MUST lay their eggs in water. A big decaying log in a bed of ferns will give a home to many creatures, including lizards, snakes, insects and salamanders. Thick mulches of leaves and hay are not only very beneficial to our gardens, they provide a cool moist food-filled habitat for tiny creatures. Vast areas of lawn make for poor wildlife habitats, so FIRST fire your Nuke-Yer-Lawn chemical lawn "service", then cut your lawn area in half by enlarging your beds of shrubs and perennials. Buy or make several bird feeders and keep them stocked with seed, peanut butter, suet, artificial nectar (for hummers), and salt. Landscape boulders provide perches, sunning decks for lizards and birds, and a place to tunnel beneath for turtles and snakes. Clay flower pots half-buried on their sides make great frog and toad houses. While some people shudder at the thought of snakes and lizards in their yards, it seems we yearn for wild surroundings since millions of us flock to wilderness areas each weekend. Why then are biologically diverse meadows and forests being strip-mined into sterile urban deserts where the only things moving are kids, dogs and self-propelled lawn mowers?

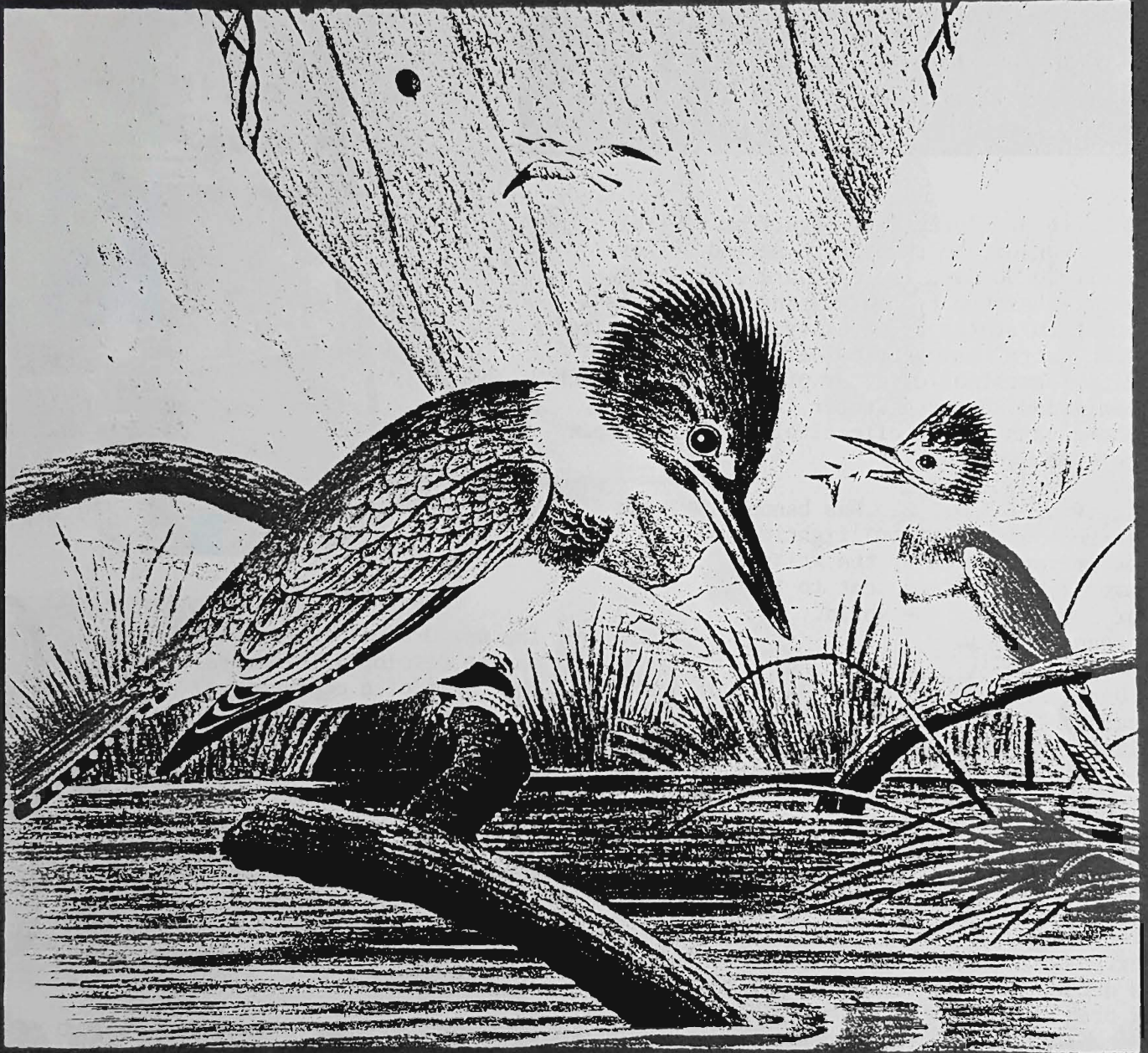
Partially to blame are the developers who cut down every tree and fill every pond when bulldozing a forest into submission. I understand the need to control overhead as I too struggle in that context with both this magazine and the organic landscaping business that sustains me. But the quest for maximum profit is toxic if there is no concern for the effect on one's community, home planet and soul. Making money is not wrong; making money DOING wrong IS, I would venture.

Each of us can shape our careers and life habits to reflect our increasing empathy for and awareness of wounded ecosystems. If we work for a polluting industry, we can change jobs and explain to our former bosses our reasons for leaving. We can start bicycling those short trips to the store, using a back pack to bring home the milk and pet food. Along with making our yards inviting to wildlife, we can play Johnny and Joanie Appleseed and re-introduce native life forms to the urban desert. In 1986 and 87 I had the pleasure to re-establish colonies of Florida's only native iris in various retention ponds, canals, lakefronts, ditches and damp gardens. The last known major colony of them in our county was near Racetrack Road in west Tampa and was quickly being destroyed by developers. I with little effort established many colonies of marine plants along Ben T. Davis Beach just by transplanting fistfuls of them at low tide while there for a swim. Neither effort was a major campaign, just a small alteration in my schedule on several afternoons. I believe that powerful changes can be made like that; parcelling them into manageable tidbits instead of grim self-denial. Millions of people each making relatively painless changes in their habits results in a very powerful wave of change indeed.

Each of us is too busy trying to survive and thrive to completely re-invent the modern human community. But we can be guerillas who, instead of planting land mines and hate, can plant little islands of life that can later explode into wildflowers, the gleam of feathers, and the wise yellow glint in a box turtle's ageless staring eyes.



cover plant:  
*Uniola latifolia*  
by  
Karl Blossfeldt  
1932



The North American Belted Kingfisher is an active hunter that feeds on frogs, fish, lizards, snakes, mollusks, crayfish and young birds. Solitary when not breeding, the male and female together dig a 3 to 15 foot long horizontal burrow into a river-bank, creating a nesting cavity at the inside end. Averaging 13 inches in length, this striking bird resides near bodies of water and is of a bluish gray color on its upper body, with the namesake blue-gray "belt" bisecting its white chest.

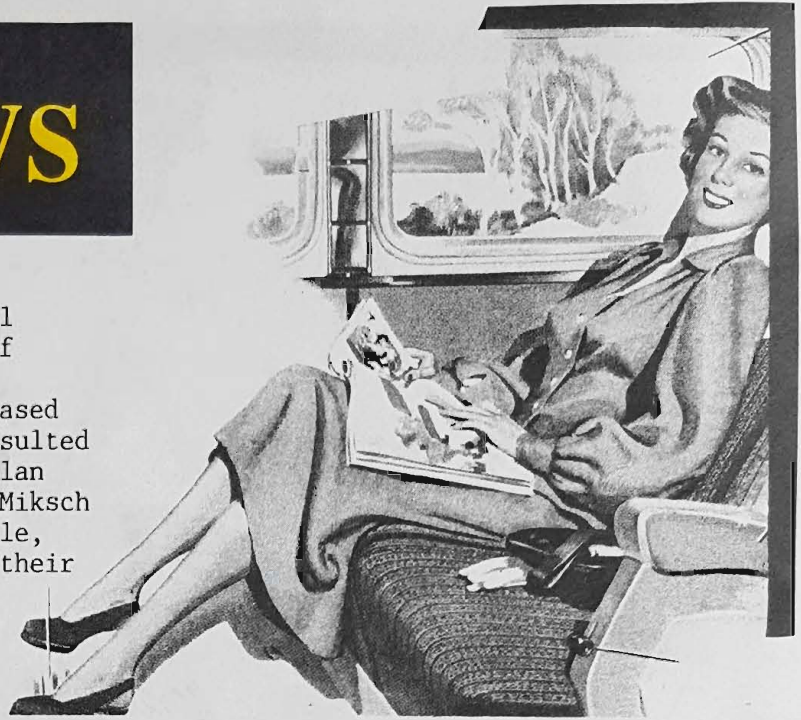
# GOOD NEWS

Biologists are "stealing" eggs from central Florida eagles, who then lay a second set of eggs within 30 days. The eggs are flown to Omaha, are hatched by bantam hens, then released in southern states at maturity. This has resulted in 129 "extra" bald eagles being born. M. Alan Jenkins, assistant director of the George Miks Sutton Avian Research Center in Bartlesville, Oklahoma says "We're effectively doubling their output each year".

The city of Tossa, Spain, has banned the cruel "sport" of bullfighting, a measure applauded by the writers of over 3,000 letters sent to the mayor from around the world. European Journal.

The United States now recycles 30% of its discarded tires, using them to manufacture athletic tracks, highway barriers, asphalt, floor mats, roofing materials, brake components, and yes, new tires.

Los Angeles mayor Tom Bradley has signed into law a measure mandating recycling. Residents will be provided 3 bins, and will be required to separate bottles, cans and paper. Phase 1 begins this August. "We believe this decade will be the decade of recycling" said Bradley at a news conference.



The new Orbital two-stroke automobile engine, developed in Australia, has 1/3 the parts of a conventional engine, is so light a man can carry it, is more fuel efficient and, even without a catalytic converter, easily meets the new stringent air pollution limits being proposed by Congress. It's tiny size will allow car designers to further lower and taper the front ends of future cars, a prime means of reducing wind resistance and thus decreasing fuel use. Ford may offer the Orbital in a model as soon as 1992.

Life is short; live it up! Nikita Krushchev



## FISH E MULSION

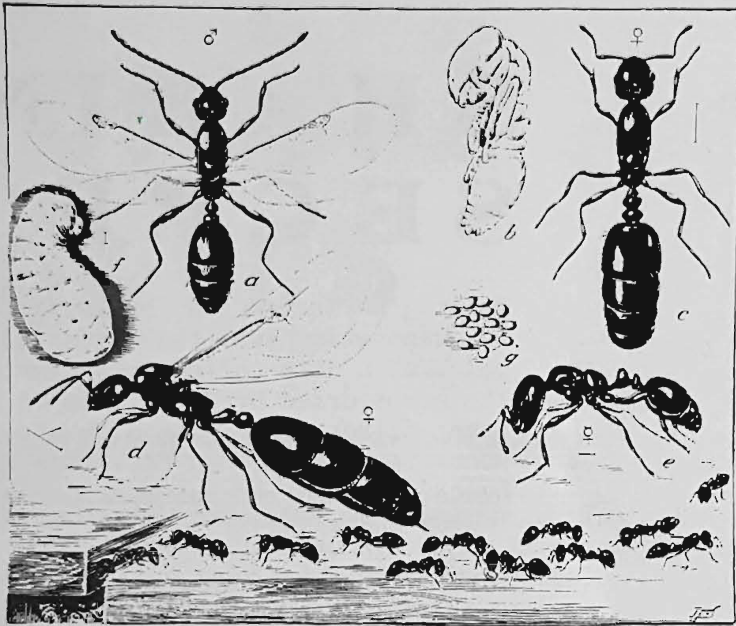
by

Sue Shee

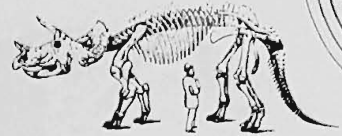


This old-fashioned, natural, truly-complete non-burning fertilizer is of a 5-2-2 analysis (5% nitrogen, 2% phosphorous, 2% potassium). The Alaska brand (which recently bought the Atlas brand Grandma used) is, like Atlas, made of the cannery waste of Pacific Ocean fish, and so contains ALL the trace elements plants need. Mix 3 tablespoons in 1 gallon of water. Drench potted plants every 3 months, garden plants monthly. Cheapest if bought in 1 gallon jugs (\$10), fish emulsion may be objectionable to certain types of vegetarian, since it is made of the pulverized remains of sentient vertebrates. Try it on ferns, orchids, veggies.

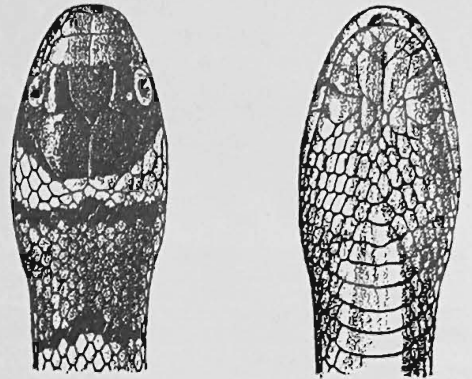
Science can be a joyous tool for curious learners.



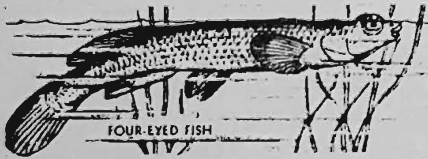
The little black ant, *Monomorium minutum*.



FOSSIL DINOSAURIA



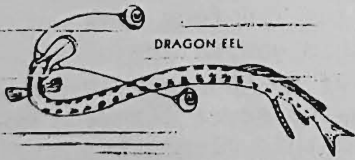
Banded king snake (*Lampropeltis pyromelana*).



FOUR-EYED FISH

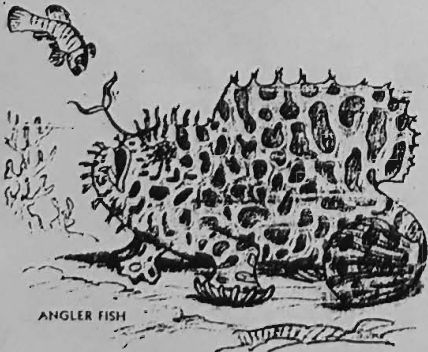
Four-Eyed Fish, above, has a strap of skin across the pupils of its eyes. This divides its sight so that it can look both above and below the water when it swims along at the surface.

Dragon Eel, below, has eyeballs on the ends of long optic nerves. Its eyes grow into normal sockets as it gets older.



DRAGON EEL

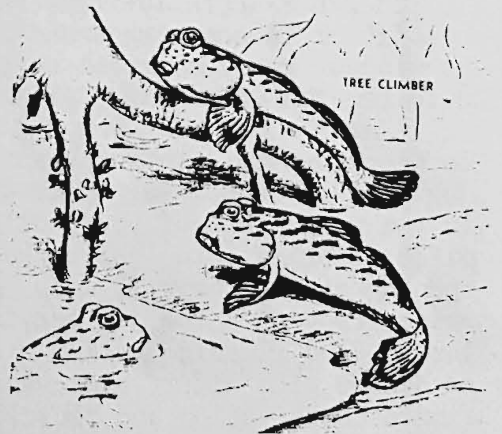
Angler Fish, below, lies at the bottom of warm seas, trying to look like a rock. Other fish come up to try to eat the long flowerlike growth on its nose, and the angler catches them.



ANGLER FISH



"Trumpet Honeysuckle"  
*Lonicera sempervivens*



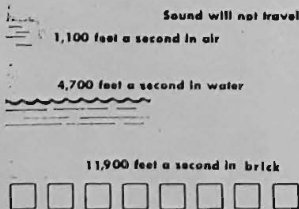
TREE CLIMBER



Road Runner

¼ life size

SOUND TRAVELS AT DIFFERENT SPEEDS





# SHARING SECRETS

Boiling herbs for tea "bruises" the flavor by evaporating away the flavorful essential oils. Use a drip coffee maker instead; pour the herbs, dried or fresh, into an unbleached paper filter along with a few spoons of honey, if desired, then brew away. The tea will be clearer, tastier but more delicate in both flavor and color.

To avoid using either paper OR plastic bags when shopping, just keep a few onion sacks gotten from the produce department manager on hand. Or buy a few burlap sacks from a military surplus store.

To order a FREE, fully-illustrated and VERY informative catalog that features and sells beneficial insects (eggs and live adults), beneficial fungi and nematodes, bacteria, plus many other goodies useful to the organic gardener and landscape caretaker, just write a note to: **NATURAL GARDENING RESEARCH CENTER**, P.O. Box 149, Sunman, IN 47041

To keep your toilet from wasting as much water, cut the top off a plastic 1 gallon milk jug so that an opening about 4 inches wide is created. To make it easier to sink the jug in the water tank of your toilet, fill it first with water. Drop in a good-sized rock or piece of brick into the jug before sinking it to keep it from floating. The four inch opening at the top will keep the jug full of water when you flush; this one gallon of water trapped in the jug serves to maintain the necessary water level in the tank to insure good flushing action without that 1 gallon being wasted down the sewer line. If each home with older water-wasting design toilets was equipped with this elegantly simple conservation and recycling plan of action, not only would millions of gallons of water be saved annually, millions of plastic milk jugs would be kept out of landfills. Household budgets would also benefit from reduced water bills.

To keep your vegetable plants from shading each other, line them up in rows in a north-south direction, with the tall crops on the north side of your garden, the short ones on the south side. (Reverse that arrangement if you live south of the equator.)

It has been estimated that 60% of the automobile tires in the U.S. are underinflated... underinflated tires are "mushy" and greatly increase the rolling resistance of a car in motion. This results in reduced gasoline mileage and increased output of air pollutants. For about \$3 you can buy a good tire pressure gauge at an auto supply store. Use it to check your tires' pressure every two weeks when buying gas. Sure it's a bit of a pain, but it's going to take millions of everyday people making relatively painless sacrifices like checking our tires twice a month if the earth's biosphere is to be kept intact. Most tires require a pressure of 32 pounds per square inch; to be sure though, just read the sidewall of your tires to determine recommended pressures.

Calendulas are easy-to-grow hardy annual members of the daisy family that tolerate frost quite well. Start them from seeds, or buy young plants at nurseries. Grown in full sun, calendulas have for centuries provided cut flowers, dried petals for dyes and for saffron substitutes, and pungent cooked greens. When they start to set seed in midsummer, don't pull them up. Cut them back to 6 inches. feed with manure, compost or fish emulsion, and soon you'll have new growth and new flowers.

# TROPICAL TOPICS



by Dr. Jack A. Randa



Pentas was first grown by the ancient Egyptians around their temples; this hassle-free semi-woody shrub is a near-perfect perennial color source for mild regions like southern California, the Virgin Islands, Hawaii, central and southern Florida and southern Arizona. The Greek word "penta" (five) refers to 5 pointed star-like florets comprising each dome-shaped flower cluster. In fact, "Egyptian Star" is a nickname for this African native, as is "Butterfly Flower" due to the attractiveness its nectar-filled florets hold for those insects. Reaching up to four feet in height, this frost-tender plant wants FULL SUN, moist mulched soil of a neutral to slightly acid pH, and ample nitrogen-rich nutrients. Pentas is so rapid growing it prefers either to be cut back to just 10" each early spring and midsummer OR... just take long-stemmed bouquets cut 10" above the base each and every week. In this way you will be spreading the twice yearly brutal prunings over the entire year while bringing into your home an excellent, long-lasting cut flower. Remove the lower leaves so they won't rot in the vase, change the water daily, and pentas bouquets will last close to a week! The more you cut, the more the plant blooms.

Feed pentas 4 times a year with a good heavy sprinkling of dried chicken poop, fish emulsion, cottonseed meal or other nitrogen-rich natural fertilizers. If you live in one of the mild climate regions listed above, you can probably find pentas plants at local nurseries, especially those that offer more unusual plants. Plants sold in one gallon pots are often straggly.... just plant them 6 inches "too deep" in the garden and chop off the flowering tops. Feed the soil well, mulch heavily with hay, and watch them surge into big bushy adult specimens by mid summer. The tall non-hybrids come in red and lavender only.



Pentas lanceolata

Propagation is by seed (they're tiny, and a bit difficult... start them in a pot with moist rich soil, water the soil FIRST, then sprinkle them on the soil. Press them into the soil then cover the pot with clear plastic and put it in a slightly shaded area to keep it from overheating. When the seedlings appear in a few weeks, remove the plastic, move the pot into the sun, then move the plants into the garden when they're big enough to handle. Or take 10 inch lengths of stem in midsummer, remove the lower leaves and flowers, and thrust all but the top 2 inches into a moist, mulched bed. Rooting occurs in about 30 days. Park Seed Company now offers the seeds of a hybrid 14" dwarf in several colors.

Catalog, Park Seed, Cokesbury Road, Greenwood  
South Carolina 29647-0001

Prejudice is a raft onto which the shipwrecked mind clammers and paddles to safety. Ben Hecht



# Margaret Head's View of the News

Well gang, I'm still having a hard time bridling my enthusiastic optimism when I see the growing broadly-based public participation in efforts to slow the further damaging of our home planet and to save some of the creatures shrinking from the growing human shadow that darkens their homelands. Like many of you I've gotten a lump in my throat while watching video of warm-blooded, big-brained friendly dolphins drowning in tuna nets. But a few years after outcry over the matter by "fringe" environmentalists like Greenpeace, the buying public seemed to become collectively aware of the needless horror and stopped buying brands of tuna by the droves, seeking instead brands produced without the slaughter of dolphins. But those brands were often hard to find. So here in the spring of 1990 Star Kist, Bumble Bee, and Chicken of the Sea announced they would also stop buying tuna from fleets using indiscriminate netting practices. They also announced that retail prices of their tuna meat would rise by only a few cents a can. Good news indeed, both for the 100,000 dolphins killed each year by those nets, and for those of us who shook off our fatalism, our apathy or our defeatism and "kicked ass" in the marketplace. I'm delighted by these announcements by company officials, but I can't help but wonder why those CEO's didn't have sensitivity to the suffering of the dolphins but DID respond quickly to a dip in sales. What I find so thrilling is that after the Self-Satisfied Reagan Revolutionized Decade of the Yuppie, suddenly many millions of us took the time to watch upsetting video of dolphin slaughter and then to quickly change their eating and shopping habits. Surely it seems that the 90's will be a Decade of People Power, people focusing on maintaining the livability and rare beauty of this the only inhabited planet known to us. Hey, whaddya say we next stop buying the gas and motor oil produced by oil companies seeking to drill this autumn in the Gulf of Mexico near Florida (where North America's ONLY living coral reef exists) and by companies who have failed to institute programs to double hull their entire oil-shipping fleets!! (Hear that Exxon?!)



**G**REGORY **P**ECS **S**EZ:



Most of us are too busy trying to meet our daily committments ...expensive (both in time and money) programs to get and stay physically fit just don't fit our schedules. Our ancestors weren't fat and flabby because they used their bodies all day long. Hey guys and gals, why DRIVE to a health club to use a stationary bicycle? Ride a bike to work every day for a great cardiovascular workout. (you'll save money and pollute far less). Why rent a roto-tiller for your garden when using a shovel works out your arms, shoulders and back? It's cheaper, doesn't pollute, and doesn't ruin the structure of your soil. Don't schedule a weights regimen when you can do sets of pushups in the kitchen, behind your desk, when jogging? You're your own portable gym...GET PUMPED UP!!

The basic freedom of the world is woman's freedom.

Margaret Sanger





# HAY MULCHES

by

Ralph Alpha

Organic gardeners succeed where others fail in large part due to their practice of keeping the soil in their vegetable and flower gardens mulched with 8 inches or so of undecomposed organic matter. Bare soil gardening is very often rife with much failure and frustration...weeding and watering become tyrannical in their frequency. But a thick mantle of decaying leaves, pesticide-free grass clippings, nut hulls, sugar cane waste, brewery waste, bush trimmings, rinsed seaweed, hay or straw cuts much of the work while doing many things to vastly improve the vitality of the soil and thus the plants:

1. It retains moisture.
2. It slowly releases nutrients as it decays.
3. Slowly acidifies alkaline soils, like those in the West.
4. Cools the soil in summer.
5. Provides food and shelter for beneficial organisms.
6. Improves soil texture.
7. Suppresses weeds, especially annual weeds.
8. Greatly reduces soil erosion.
9. Helps the soil absorb sudden heavy rains.
10. Provides a convenient place under which one can tuck valuable but unsightly kitchen waste.

Trouble is, getting **ENOUGH** of a desirable mulch. Bales of straw and/or hay purchased at feed stores are a convenient and relatively inexpensive solution. Whereas loose mulches require a truck for delivery, bales of hay will fit either in the trunk or back seat of most cars. Just grab a bale once a month on the way home from work. Esthetically, wheat or oat straw or one of the hay types offer a uniform golden top layer for both vegetable and ornamental gardens. Using various mulches as they become available is a good practice, but one that can create a patchwork look. But just broadcast a 3 inch layer of fresh hay over the various mulches for a nice, neat, uniform appearance. Just cut the baling strings, and notice how the hay comes off the bale in thick slabs...you can "tile" the garden with these, or, for a more uniform look, shake them apart so that the hay sifts down onto the soil into a tangled mesh. A good initial thickness is 10"-12", since it is a fluffy material. Then use a hose (with your thumb over the end) to produce a coarse heavy spray to tamp down the hay. This will immediately neaten up the tousled new mulch while reducing the fire hazard that new hay mulches can pose until they begin to decay in a few weeks.... tell smokers you'll compost them if they throw a cigarette butt in the garden! This initial tamping down of the hay with water also renders the new mulch virtually windproof. It's also a good idea to, that evening, water the garden with an oscillating sprinkler to further settle the mulch and deep-water the garden itself. Next day, use your hands to "part" the hay (as you would hair with a comb) to expose a four inch wide band of soil into which you can plant your seeds or seedlings. As the new plants reach a height of 8" to 10", just tuck the hay up against their bases to trap moisture and choke out weeds. If hay mulching an established garden, just apply it thickly between the rows, then water it down. A garden so mulched will need just 2-4 deep waterings **PER MONTH!**

If you live in the Southeastern U.S. or a similar mild climate region, look for a type of hay called "**COASTAL**"...it is an attractive, fine-textured blonde hay made from tall-growing Bermuda grasses...it is sold for \$3 to \$5 per bale, each of which is very tightly packed, thus providing **MUCH** mulch when fluffed out. If you live in a snowy climate region look for protein-rich (thus nitrogen-rich) **ALFALFA** hay. Such areas also often offer **WHEAT** or **OAT STRAW**, both of which are low in protein but much cheaper. Cheapest of all is "**SPOILED HAY**" which is useless for animal feed but **GREAT** for mulching. Farmers and feed lots often wish to dispose of it **FOR THE TAKING!!** Lastly, avoid "**TIMOTHY HAY**" for it is often loaded with weed and hay seed.

**T**he Mountain Ash (*Sorbus species*) is, in fact, a member of the Rose Family, and not related to the true Ash trees (*Fraxinus species*). It is very cold hardy, rather slow-growing, and tolerates dry soils quite well.

Both the American Mountain Ash (*Sorbus americana*) and the European Mountain Ash or Rowan Tree (*Sorbus aucuparia*) produce showy clusters of white blossoms that resemble those of the elderberry. Each flower produces a red berry, with the entire cluster of berries clinging through the winter, providing cold and hungry birds with a sugar rich food. These berries are used to make fine jams and jellies, and are so rich in Vitamin C that in times past they were a treatment for scurvy. The tree itself has a pleasing shape that makes it useful in parks and landscapes, as well as reforestation efforts.



**ROWAN-TREE, OR MOUNTAIN ASH (*Sorbus species*)**

A. Flowering branch. B. Fruit. C. Single flower, enlarged. D. Flower, after removal of petals. E. Transverse section of fruit.

DELPHINIUMS

For K. C.

"Still - in a way - nobody sees a flower - really -  
it is so small - we haven't the time - and to see  
takes time, like to have a friend takes time."

Georgia O'Keefe

This year I will see the flowers.

Margaret and I will drink our tea  
by daffodil hours. In the witness of wisteria  
we will talk of babies, and poppies,  
and cycles of moon.

When storms threaten  
we fasten the clematis to the post;  
wish luck the brazen zinnia;  
stroke the iris, soft chin.

Later we drink from  
columbine cups, and look lovingly  
upon the liatris, while the house,  
in a sea of hemerocallis waits.

The kitchen's yeasty air.....  
The apron on the hook.....

We beside the cherry tree  
murmuring to pansies patiently.  
Our dreams filled with friendship and flowers.  
Our roots tunneling spring's soil.

In the end we will be fine  
as delphinium's stem,  
and covered in beauty  
from head  
to toe.

Joan Maloof  
Rt. 1 Box 270  
Quantico, MD 21856

THE OLIVE TREES

"Nature's way and mind's way rhyme."  
- Hugh Kenner

On Zante  
the olive trees  
are the only owners of soul.  
The shaded wanderers below  
praise their beauty in muted tones.  
From such silence all prayer grows.

Outside the grove are flowers,  
but the olives stay somber -  
green - and gray. They  
are not offering any answers.  
It's as if each new cell  
were formed from some  
special sorrow.

And we envy the trees  
that own their soul  
so well.

Joan Maloof

PICKING LILACS

So many things to do today...  
but the most important must be picking lilacs.  
When I was a girl, younger than my daughter,  
my parents were already apart -  
he loved another woman,  
so what do you say to a child?

Nothing in words.  
My mother taught me to sing:  
"Que Sera, Sera" and "Moon River."  
My father picked me up each Friday,  
he was never late. Not once.

Everything was sane, civilized,  
until one spring Sunday  
when it was time to take me home -  
and Daddy stopped to consider the lilacs.  
He seemed spellbound by the shrub  
covered in lilac stars...  
and suddenly started snapping off branches,  
handing them to me, the sweet bouquet  
growing larger and larger, until finally  
I had to hold it like a baby in my arms.

"For your mother," was all he said,  
but the whole way home the car was  
filled with love's fragrance.

Joan Maloof

\$5 is paid for each poem published in The Garden Doctor. Unaccepted works cannot be returned without SASE. Please submit your best works to: POETRY, The Garden Doctor, 1684 Willow, Denver, CO 80220

# The Wall Street Kernel

## INVESTORS KEEP EYES ON "GREEN" AUTOMOBILES

Very few of us wish to give up our cars and the freedom they provide. But their appetite for fossil fuels mars the air in our cities while being a primary source of the carbon dioxide implicated in global warming. But a real glimmer of hope from automakers could be fanned into bright economic fire if environmentally-minded car buyers demand "Green" alternative cars be sold SOON. Cleaner-burning cars are not Jetson-style far in the future pipedreams; fully producible running prototypes exist NOW and are making the international car show circuits. Take a look at the "Green" cars being shown.

Mercedes has joined BMW in modifying a current model so that it can be powered by hydrogen gas, which when burned makes water vapor as its only pollutant. This model differs from the BMW in that the engine adds gasoline to the hydrogen at high speeds. Hydrogen is less explosive than gasoline, has a lower octane, and so produces less power for acceleration and passing. Consumers want power on demand; Mercedes says the hydrogen-gasoline blend gives that

while reducing emissions. A tank of magnesium hydride pellets stores the gas (vs. liquid hydrogen in the BMW).

More conventional are Audi's and Volkswagen's turbo-charged diesels that use additional air to more completely burn the fuel. VW also uses an oxidation catalyst to burn up over half of foul smelling diesel fumes that such cars often spew. Audi couples 2nd generation direct-injection with the turbos. It should be noted here that both approaches still use fossil fuels. But Audi also has developed a modified current model that uses an electric motor to power the rear wheels in the city; a conventional engine runs the front wheels at high speeds. Batteries drive the electric motor.

GM's "Impact" electric car runs solely on electricity stored in lead-acid batteries. It reaches 60 mph in just over 8 seconds, has a range of 124 miles per charge (which takes only a few hours). A coefficient of drag of just .19 makes it VERY streamlined indeed; this and its light weight aid acceleration.

GM, usually noted for uncreative ill-advised marketing decisions, may, in fact, begin producing the "Impact" (let's hope they will change the name) within a year. The City of Los Angeles, committed to a comprehensive clean air program, has shown interest in adding the car to its fleet of government vehicles. It should be noted that if the electricity used to recharge the array of batteries beneath the hood comes from a conventional power plant the Impact will not be a pollution free car. GM admits that the cost per mile to run the Impact is double that of a gas-powered car due to the high cost of replacing the batteries periodically.

Finally, Peugeot has been displaying a car called the Oxia which powers its AC system with solar cells in the roof panel. This is a modest beginning that hopefully, as the real efficiency of solar cells increases, will result in a car that is powered by the sun. The stock of THAT car will skyrocket, no doubt!



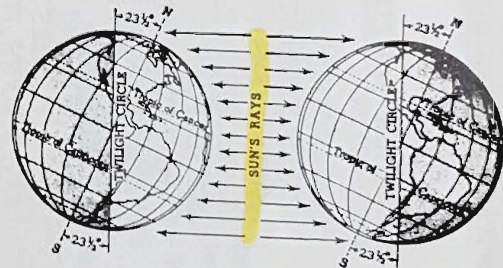
# Summer

...comes alternately to each hemisphere of our planet during our year long journey around the closest star, the sun. As ours, the Northern Hemisphere is leaned towards the sun (thus receiving its heat and light at a

more direct angle), the Southern Hemisphere is leaned AWAY from the sun during daytime hours (thus less heat is received). Thus winter rages in South America and Australia while North America, Eurasia and Greenland enjoy summer. This heat differential between the two hemispheres acts like a global pump driving the forces of weather all over the world. Understanding how the seasons result from our planet's circular dance around

the sun can add joy to daily life; we'll notice the sun is high in the sky at noon during summer, closer to the horizon at noon during winter. With time we can notice how the slow lengthening of afternoon shadows late in summer precedes the migrations of birds, the setting of seeds, the first cool evenings.

June



December

For snowy climate gardeners early summer is prime planting time for the truly frost sensitive annual flowers and vegetables. The planting chart on the next two pages is to help those folks finish planting their gardens. In all regions summer is a time of rampant growth, so it is up to us to keep the soil moist and rich with deep mulches of hay, grass clippings, rinsed seaweed, kitchen waste, fish waste, manure, bush trimmings and other organic "wastes". A few feedings of pesticide-free feed grade cottonseed meal or fish emulsion or manure tea are a good idea, too. Nitrogen rich mulch materials like fresh cut alfalfa, banana leaves and horse manure will also foster beneficial bacteria who ultimately are THE source of soil fertility, for it is they who decompose organic materials into the simpler compounds plants absorb through their roots. Since they are continually rotting away your mulch into nutrients, water vapor and carbon dioxide, you must continually replenish the mulch layer...you are never through mulching.

To keep annual flowers blooming longer and more heavily, keep the plants from setting seed (after all, that's why they're blooming) by either pinching off faded blooms or, more pleasurably, taking bouquets each and every week. Flowers in the home is a prime reward of gardening...indulge in it, and your flowers, if well-fed, will respond with wave after wave of new blooms, which is the whole idea behind having a flower garden, isn't it?

Lawns appreciate a spring, midsummer and late summer feeding of cottonseed meal, an inch of water every 5-7 days, a July spraying using yeast in sugar water to speed up the digestion of fallen clippings, and also would rather not be scalped each mowing. Try a height of 2". Leave the bag OFF the mower so that beneficial critters can quickly release their nutrients.. "thatch" is a phenomenon on a chemical addicted lawn.

And be sure during this season of heat and growth to routinely, religiously, recline in the shade of a tree. Sip something cold and listen to the world inside you while watching the one around you. Admire your gardens as your home planet silently whisks you to the other side of the solar system (and winter).

Veggies and flowers followed by an "H" are frost HARDY and can be planted in the garden 2 weeks before last expected frost in snowy climate regions. Mild winter areas like S. California & S. Florida: plant them December through February to beat the heat.

## VARIETY

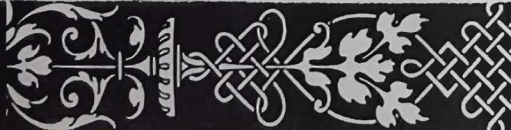
## WHEN

## SEED DEPTH


## EDIBLE PORTIONS


BEETS H	APRIL-MAY	1/2"	LEAVES, ROOTS
BOK CHOI H	APRIL-MAY	1/4"	LEAVES, STEMS, FLOWERS
BROCCOLI H	APRIL-MAY	1/2"	LEAVES, STEMS, FLOWERS
BRUSSELS SPROUTS H	APRIL-MAY	1/2"	LEAVES, STEMS, FLOWERS
BUCKWHEAT H	APRIL-MAY	1/2"	LEAVES, FLOWERS, SEEDS
CARROTS H	APRIL-MAY	1/2"	LEAVES, ROOTS, FLOWERS
CABBAGE H	APRIL-MAY	1/4"	LEAVES, FLOWERS
CHARD H	APRIL-MAY	1/2"	LEAVES, STEMS
CAULIFLOWER H	APRIL-MAY	1/2"	LEAVES, FLOWERS
COLLARDS H	APRIL-MAY	1/2"	LEAVES, FLOWERS
CHIVES H	APRIL-MAY	1/2"	LEAVES, ROOTS, FLOWERS
CHICORY H	APRIL-MAY	1/4"	LEAVES, ROOTS,
CORN SALAD H	FEB. -MARCH	1/2"	LEAVES
CILANTRO H	APRIL-MAY	1/4"	LEAVES, SEEDS
DAIKON H	APRIL-MAY	1/2"	ROOTS, LEAVES, FLOWERS
ENDIVE H	APRIL-MAY	1/2"	LEAVES
FAVA H	FEB. -MARCH	1"	SEEDS (allergic reaction possible)
KOHLRABI H	APRIL-MAY	1/2"	LEAVES, STEM
KALE H	MARCH-APRIL	1/2"	LEAVES, FLOWERS
LETTUCE H	APRIL-MAY	1/2"	LEAVES
MUSTARD H	APRIL-MAY	1/2"	LEAVES, FLOWERS, SEEDS
ONION H	MARCH-MAY	1/2"	LEAVES, BULB, FLOWER
ORACH H	MARCH-APRIL	SEDS, 2"-6"	SEEDS, SEED PODS, FLOWERS, LEAVES
PEAS, SNOW	MARCH-APRIL	1"	ROOTS
PARSNIP H	APRIL-MAY	1/2"	LEAVES
PARSLEY H	APRIL-MAY	1/2"	LEAVES, SEEDS
QUINOA H	APRIL-MAY	1/2"	ROOTS, LEAVES, FLOWERS, SEED PODS
RADISH H	APRIL-MAY	1/2"	LEAVES
RADICCHIO H	APRIL-MAY	1/2"	LEAVES, SEEDS (source of canola oil)
RAPE H	APRIL-MAY	1/2"	ROOTS
SPINACH H	MARCH-APRIL	1/2"	LEAVES, FLOWERS, SEEDS, STEMS
SALSIFY H	APRIL-MAY	1/2"	LEAVES, STEMS, SEEDS
ANISE T	MAY-JUNE	1/2"	LEAVES, FLOWERS
AMARANTH T	MAY-JUNE	1/2"	SEEDS, SEED PODS, FLOWERS, YOUNG LEAVES
BASILS T	MAY-JUNE	1/2"	LEAVES
BEANS, POLE, BUSH T	MAY-JUNE	1"	SEEDS, SEED PODS, FLOWERS, YOUNG LEAVES
BORAGE T	MAY-JUNE	1/2"	LEAVES, FLOWERS
BASELLA T	MAY-JUNE	1"	SEEDS, SEED PODS, FLOWERS, YOUNG LEAVES
BLACK-EYED PEAS T	MAY-JUNE	1"-2"	RIPE & UNRIPE SEEDS, DRIED STIKKS (tea)
CORN T	MAY-JUNE	1"-2"	


# VEGGIES





 In your seed packet with 1 BEET JUICE FINGERPRINT write "Flax (*Linum usitatissimum*). This plant is the source of the fiber commonly known as Linen...notice the similarity to the botanical name. Its seeds are used whole in "Uncle Sam's Laxative Cereal" and in birdseed; when pressed they yield the Linseed Oil used in paints. What remains after this oil is extracted is called linseed cake and is used as a high-protein feed for animals. Lastly, flax straw is used in the manufacture of high-grade paper. A fairly hardy (frost-resistant) annual, flax wants rich soil of a neutral pH in a full sun location. Plant the seeds  $\frac{1}{2}$  inch deep in loose sandy soils,  $\frac{1}{4}$  inch deep in heavy clay soils. Planting time is early spring in snowy climate regions, late fall or early winter in mild winter regions like peninsular Florida, southern California and St. Croix. Keep the seed bed moist till germination in a couple weeks. Space the plants 6"-8" apart. The delicate wispy stems may reach up to 2 feet in height and are topped with charming pale blue flowers...for this reason flax makes an interesting addition to the flower garden.

 In your seed packet with 2 BEET JUICE FINGERPRINTS write "Love-Lies-Bleeding (*Amaranthus* species). This gory sounding semi-hardy (frost-resistant) annual was grown by "Native" Americans as a grain crop, the seeds used as we use wheat or corn. The large, bright green leaves are delicious cooked like collards. Before planting, loosen the soil and work in plenty of manure, grass clippings or compost. Sow the seeds  $\frac{1}{4}$ " deep in early spring in snowy climate regions, midwinter in mild areas. Be sure to choose a full sun location. Since the plants reach up to 5 feet in height, they look great as a backdrop in flower gardens or try growing them in rows beside your corn plot. Space them about 2' apart. About 3 months after the seeds sprout the plants will produce long, thick pink drooping "cattail" flower spikes which, in snowy climate areas, will drop hundreds of dormant seeds after the first hard frost. The seeds will sprout all by themselves the following spring. Try using the unusual pink flower spikes in arrangements.

 In your seed packet with 3 BEET JUICE FINGERPRINTS write "Turnip, Purple Top White Globe". Turnips are an artificial vegetable developed from the wild plant *Brassica rapa*. This species has also yielded the canola plant and rapini. Turnips are a cool weather plant, so plant these seeds in early spring in snowy regions, mid winter in mild areas. They will have the best flavor and texture if growth is rapid, so work plenty of manure, rinsed seaweed, compost or grass clippings into the soil. If soil in your region is quite acid, also work in a moderate sprinkling of dolomitic limestone. Choose a full sun location for maximum root size. Use a stick or your finger to make a furrow about  $\frac{1}{4}$  inch deep in the loosened soil, and sprinkle the seeds about  $\frac{1}{2}$  inch apart. Cover them with  $\frac{1}{4}$  inch of soil and water gently but thoroughly. Mulch between the rows with 6" to 8" of hay or grass clippings to retain moisture and nourish the soil. Harvest the roots when 1"-3" across. The leaves make great "greens" when cooked. Snowy climate gardeners often plant a second crop in early fall for a final harvest. (Special thanks to Robert E. Alderman Sr. for donating these seeds.)

Seeds will remain viable for years if sealed in jars or ziploc bags and kept in the refrigerator, NOT the freezer. Storing them at room temperature greatly shortens their life.





In these golden years of the 20th Century, organic gardening and living is coming into fashion, no longer a spacey oddity. Young Americans and old alike are learning that artificial pesticides are toxic to us too! Make the switch today!

## "CH-CH-CH-CHANGES"

by

Davy Bowid

**F**leas, along with viruses, are a life form that most of us

wouldn't mind extinction snatching up. People who otherwise wouldn't even consider using artificial pesticides feel driven to when

their family and pets are being eaten alive by these bloodsuckers. Fleas not only make us and our pets itch, they transmit intestinal worms to our pets. Toxic pesticide dips, like malathion, sevin or others are cholinesterase inhibitors; cholinesterase is an enzyme that plays a crucial role in the nervous system of both you and me but also Spot and Miss Kitty. Why dip our pets in nerve toxins? Besides, many fleas are now genetically resistant to these poisons. So let's review some much safer, cheaper methods for killing fleas on our pets while making our homes and yards inhospitable to them.

**1. A WEEKLY BATH WITH PINE OIL CLEANERS AND SHAMPOO:** Pine oil, extracted from the needles of pine trees, is mixed with some water and detergent to make pine oil cleaners. Wet your pet down thoroughly with warm water in a tub or bathtub with the plug in, so that fleas in between the toes drown. (Serves them right). In a container mix  $\frac{1}{2}$  cup human shampoo,  $\frac{1}{2}$  cup pine oil cleaner (like Pine Sol or Scotch Pine) plus a few cups warm water. Before using this mixture, however, wet the animal's face and lather up the entire head using a tearless baby shampoo....this denies the fleas dry high ground to escape to. Then, use a sponge to fill your pet's ears with the pine-shampoo mixture to kill fleas smugly hiding there. Pour the rest of the mixture over the animal and work it up into a good lather. Work it well into the "armpits", around the genitals, behind the ears and other hiding places. Have your pet then stand there for 5 minutes, assuring it that you only have it's best interests at heart....this wait kills off the fleas largely by drowning. (Hey, they should have thought about that before feasting on your pet).... rinse the animal thoroughly with warm water. Towel dry your pet, who will be flea-free, clean-smelling and with shiny disinfected fur and skin. Remember, a female flea MUST have a blood meal to get the protein needed to make eggs, so with every bath you kill many fertile females BEFORE they can lay gillions of eggs. This alone will reduce your flea problem GREATLY in a few weeks.

**2. BROADCAST WHITE (HYDRATED, QUICK, SLAKED, MISSISSIPPI) LIME** over your entire yard if your soil is very acid. Your grass and groundcover plants will ultimately benefit from this caustic calcium source, which will "fry" the maggot-like flea larvae living by the thousands in your yard. Farmers have long used white lime to control lice in the chicken coop without hurting their chickens. Since fleas like dry, sandy soil, this liming can help you establish a dense groundcover of blended grasses, ajuga, wedelia or lippia. For the same reason thick moist mulches of hay and grass clippings in your ornamental beds will discourage fleas from living there.

**3. DIP THE PET WEEKLY WITH "HiLo" Dip:** Marketed at feed stores since the 30's, this pleasant smelling mixture of pine oil, castor oil, plus the natural plant-derived insecticide ROTENONE has, in the hands of farmers, killed countless fleas and ticks. If you can't find it at feedstores, write or call: HiLo Products, Inc., Route 28, Glenford, New York 12433 ph. 914-657-8100.

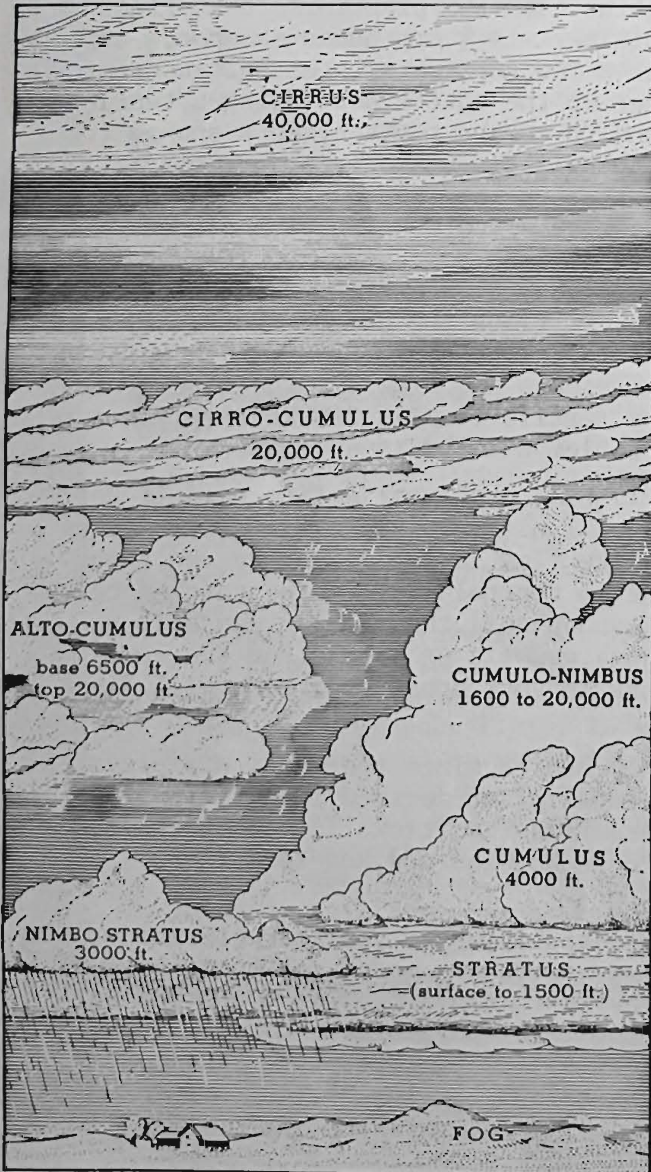
**4. SPRAY YOUR HOME WITH BORIC ACID SOLUTION** to kill fleas living in your carpets and furnishings. Commercial exterminating firms have caught on to the safety, effectiveness, and low cost of this old-fashioned natural bug killer. Non-staining and odorless, boric acid is toxic to people only if ingested in large amounts. Dissolved in water, it is sold as a safe and common eye wash! Yet insects are readily killed by it if they ingest it. Try dissolving 1 pound of ORTHOBORIC ACID (in the bug-killer section of many grocery

(CONTINUED NEXT PAGE)

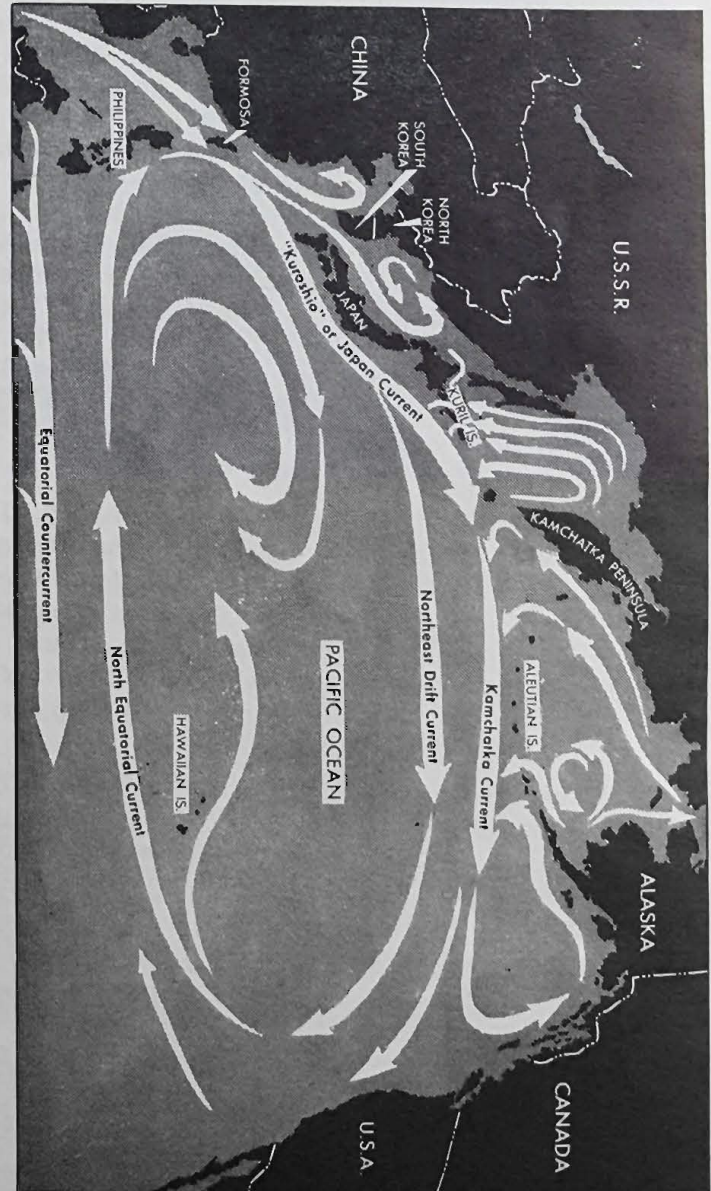
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stores) in 1 gallon of boiling water...stir as the solution simmers until all the white powder is dissolved. Let cool till very warm, pour into a 3 gallon capacity pump spray tank then add 1½ gallons warm tap water. Then set about spraying every square inch of your floors and carpets. Commercial applicators tout the non-staining nature of this solution with good reason; thus it's a good idea to remove couch and chair cushions and spray beneath them. Replace the cushions, then spray them too. Spray THOROUGHLY beneath every bit of furniture, along baseboards, remove everything from closet floors and spray there, too. Fleas can't fly, and so ultimately end up in the carpet and other low areas where they can hide. Spray carpets especially, in fact till they are a bit damp, since they are primary flea breeding grounds. If you wish, wait till the carpet is dry and use a broom to work the tiny boric acid crystals down into the carpet. **DO NOT VACUUM FOR 2 WEEKS!** This will help insure the deaths of many freshly-hatched larvae plus many adults. Then, vacuum. A good idea is to then spray the carpets with boric acid solution again, let dry, sweep and go another 2 weeks without vacuuming. Total cost for the acid for an average sized home will likely be less than \$15, and many people report **ZERO FLEAS INDOORS** for 1 YEAR!!!

So until fleas go the way of the infinitely more interesting dinosaurs, use these steps to help keep your pet, family, home and yard free of them. Fossils show that millions of years ago, fleas were 1 INCH LONG!! So I guess modern fleas are an improvement!



The warm Japan Current moderates winter along N. America's West Coast.



# DIRTY SOMETHING

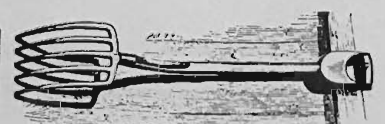
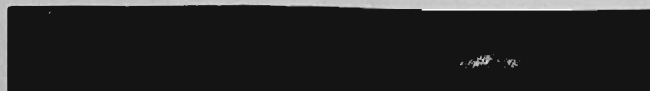
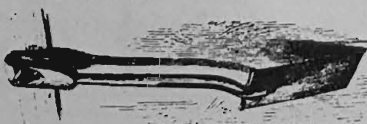
**B**athed in moonlight and filled with angst (once again) Michael stands wrapped in a quilt by his second floor bedroom window, gazing down at his faltering vegetable garden. His handsome but boyish face is darkened by troubled confusion... hadn't he, a self-aware ex-hippie, ex-yuppie ex-Chemlawn customer stopped using artificial chemical pesticides and fertilizers this growing season? So why were his broccoli plants so sickly looking, so slow-growing, so bug-ridden. Was organic gardening yet another opium pipedream, an idealistic residue of mescaline use 20 years prior? He feels a warm, friendly hand on his shoulder... his wise but perky wife has awakened and knowingly come to him, sensing the true cause of his pain. Their eyes meet, her warm tender lips approach his adorable ear... "It's your dirt, darling... your dirt sucks". Revelation fills his achingly beautiful eyes as she returns to bed. "Tomorrow..." he thinks, "I'm learning something about dirt". Full of resolve and peace, he returns to their satin-sheeted Posture Pedic. He dreams of a vibrant garden.

The next day he uses his lunch break to check out from his library books about healthy soil, books about deep mulching by Ruth Stout, books about natural fertilizers, beneficial insects and wouldn't you know it, that very evening he finds in his mailbox his first issue of The Garden Doctor; his red-haired eternally adolescent best friend had seen his struggling gardens and ordered him a gift subscription. So all that evening Michael sat in his favorite chair and read, amazed at the simple truth that the healthy alive soil needed by plants is easy to create.

The following morning he called his Agricultural Extension Service agent and learned that, since he lives east of the Mississippi River he probably has acid soil, which most veggies don't like. So on the way home from work he stopped at a feed store he'd found in the Yellow Pages and bought a 50 pound bag of dolomitic limestone, which that evening he sprinkled quite heavily on the garden, raking it in between the rows. He then took the two bales of hay he'd also bought at the feed store and covered the soil between the rows of post-Chernobyl looking veggies with 10 inches of the fluffy golden mulch. He then broadcast, right on top of the hay, 50 pounds of feed-grade cottonseed meal, having read that FEED GRADE meals almost always test free of pesticide residues. He then set his oscillating sprinkler in the center of the refurbished garden and let it run for 3 hours, as he read also that this usually produces the 1 inch of water that a garden likes weekly.

That night Hope awoke to see him sleeping like an achingly sexy baby, his REM's indicating dreams of the dolomite neutralizing soil acidity, which, with the meal and hay begins a huge population boom of the beneficial bacteria and fungi his soil had been so dearly lacking. He dreams of the hay and the kitchen waste they will be tucking beneath it decaying into the dark, moisture retentive humus that healthy dirt abounds with. He dreams of earthworms thriving in the mulched moist gardening, turning the hay (and the layers of grass clippings and leaves he will religiously cover his garden with BEFORE mulching with hay) into their famous castings long sought as a soil amendment. Drawing close to his side, Hope falls asleep. All night long a smile graces their sleeping faces.

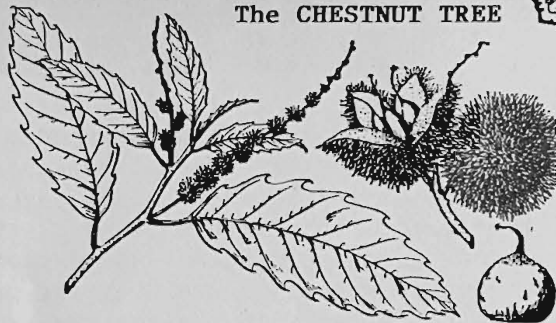
One month later, on a warm summer evening, they stand in moonlight at the bedroom window, amazed at how the previously struggling plants have responded to the liming, feeding and mulching of the soil. "Just think..." he says, "how our next planting will do, having great soil right from the start!". Her arms encircle his broad, well-defined chest, proud of him, feeling lucky, perky and wise. Heads leaned together, they beam down at the garden. But suddenly Michael realizes that his collectible BMW pollutes the air... his angst returns.



...and DAAANCE in the light of the room.

The American Chestnut (*Castanea dentata*) succumbs to a blight, and has been replaced by the Chinese Chestnut (*C. mollissima*), which tolerates most soils and climates. It produces large nuts.

**The CHESTNUT TREE**

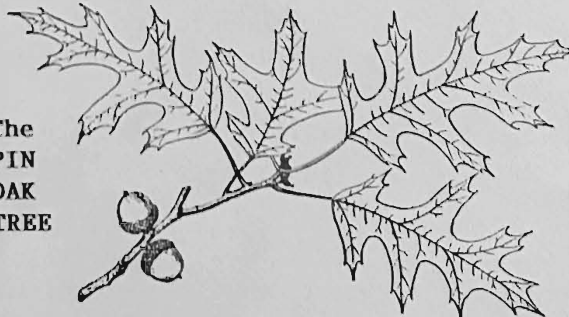


**The SUGAR MAPLE**

The Sugar Maple (*Acer saccharum*) is a tall and stately deciduous tree. Cold hardy, it wants rich, well-drained soil. The sap is used to make a familiar breakfast syrup, and its leaves turn bright reds and oranges each autumn.

One of over 200 oak species, the Pin Oak (*Quercus palustris*) wants a damp, rich clay soil. Slow-growing but long-lived, it produces large acorns relished by wildlife. It is a fine deciduous shade tree.

**The PIN OAK TREE**



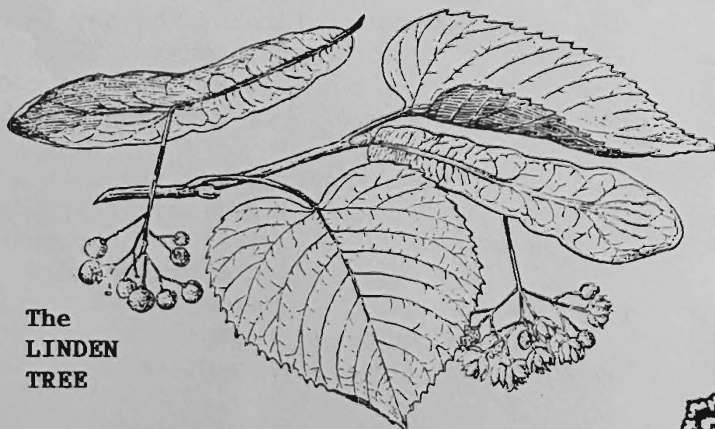
**The WHITE BIRCH**



A deciduous cold hardy tree, the White Birch (*Betula papyrifera*) thrives in moist, sandy, humusy soils. It fails quickly in hot humid areas. Its delicate leaves turn bright yellow in the fall.

Also called Basswood or Lime tree, the Linden (*Tilia species*) has a pleasing pyramidal shape. Cold hardy and deciduous, it prefers a rich, moist but well-drained soil. A fragrant oil used in perfumes is extracted from its flowers.

**The LINDEN TREE**



Bitterness is both cause and cost as agility of the heart is slowly lost.  
Margaret Head

Dear John...We love **The Garden Doctor**.My friends in Northern California were so pleased,too....**Donna Waller,Gainesville,Florida**

Dear Garden Doctor...Attached is a check for \$24....I am very excited about this subscription.Sincerely,**Tamara Zbicki,San Francisco,California**

Hello....Please send me your quarterly magazine.I saw it advertised in the "New Age Journal".Thank you very much.**Kathleen DeCelle,Wolcott,Vermont**

Howdy!...Subscribe me,please! And,I'd like some writer's guidelines (if you have any) or how does one write for you? I am a Master Gardener,and write a weekly newspaper column.. **Cathe' Fish,Bisbee,Arizona**...Editor John Starnes answers..."I like your enthusiasm,Cathe'.This is a cheap outfit...each poem published in **The Garden Doctor** earns the writer a mind-numbing \$5! Short articles will earn the writer **TEN WHOLE DOLLARS!** I promise that once (if) **The Garden Doctor** moves into profitability,fees paid writers will jump up significantly.Thanks for your interest.

Dear Garden Doctor...Please send me a subscription to **The Garden Doctor**,and one as a gift to my friend (Judith Stanton) as well.Enclosed is \$48 to cover costs.Thanks! **Dionne Pia,Monroe,Connecticut**

Dear John...Donna Barrington's gift was a wonderful surprise.Donna's a special person.I wish her well.Thanks a lot Donna.Your seeds already have a place of honor in a garden I till in Salt Point,New York.Please rush this quarter's printing to my friends in Columbus,Ohio and Salt Point,New York.Keep up the good works.**Charles D. Donahue,Croton-On-Hudson,New York** (Thanks Charles,for giving **The Garden Doctor** to Eleanor Moore of Salt Point,New York and Valerie Hooken of Columbus,Ohio.J.S.)

Dear John Starnes...Thank you for your good work.I will spread the word about your magazine...**Jean Stevenson,Aurora,Colorado.**

Dear Garden Doctor...My brother-in-law is a garden fiend.We are sending him a subscription to your publication to encourage his habit.Please send to **Anthony Flaccavento,St. Paul,Virginia**.Thanks very much! **Donna Sylvester**

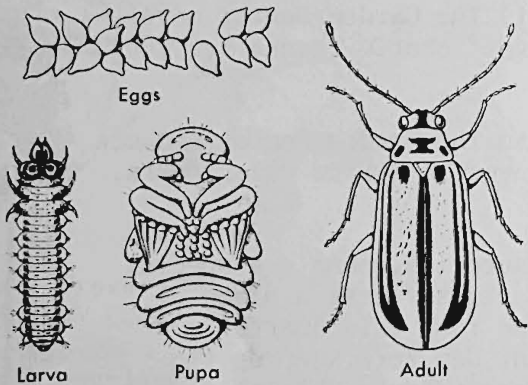
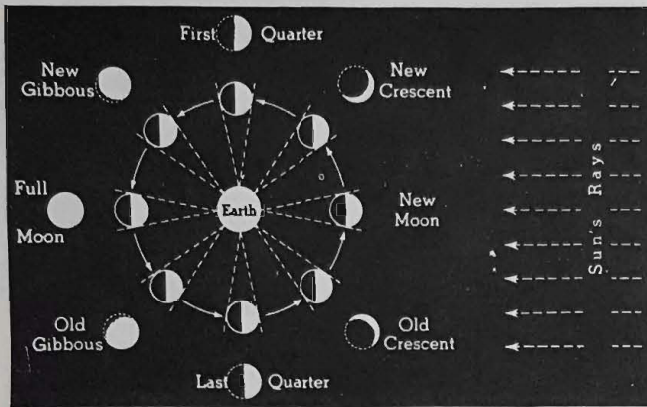
Dear Gentlepeople,I would like to buy a subscription of **The Garden Doctor** for my friend.I was happy to hear of you through East West.You will be the perfect gift for my friend (Thais Carr of Thompson Station,Tennessee).Thank you for making shopping easy.**Sheri Willard,Thompson Station,TN.**

**The Garden Doctor Folks:**Hi.Read about your publication in Utne.I'd like to subscribe.Enclosed is a check for \$24.Thank you.Look forward to my first issue!**Samaya Jones,Los Altos,California**

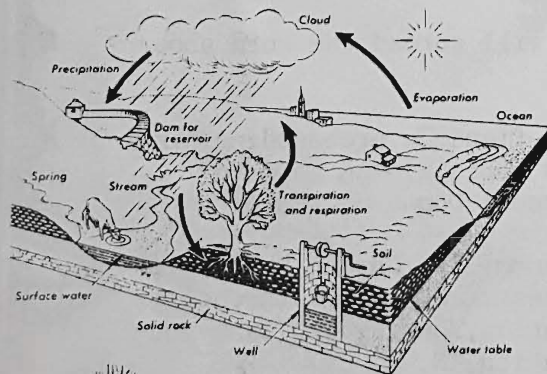
Garden Doctor...I'm enclosing my check for \$24 for a year's subscription to **The Garden Doctor**.I read about it in East West,March 1990....I see you include information on the environment in your magazine.**Maree Brooks,Ottawa,Kansas**

Dear John..I've received the 1st copy of my new subscription & think it's nifty.I'll be daring & go for the adult-language "tasteless original" in the future....I've got a question...I live in a small apartment and would love to get some ideas on composting.I've never figured how to do it without a yard or pitchfork.**Michael Holland,Carrboro,NC.**(Try filling a garbage bag 2/3 full of dry leaves;add 1 cup limestone,1 gallon fish emulsion mix,some manure then twistie the bag shut.Poke the bag 30-50 times with a pencil to admit air.Open the bag to add food scraps as needed.Add earthworms.In 6 mos. it's compost. Oh yes,store the bag in a closet,the trunk of your car,on the balcony,etc.

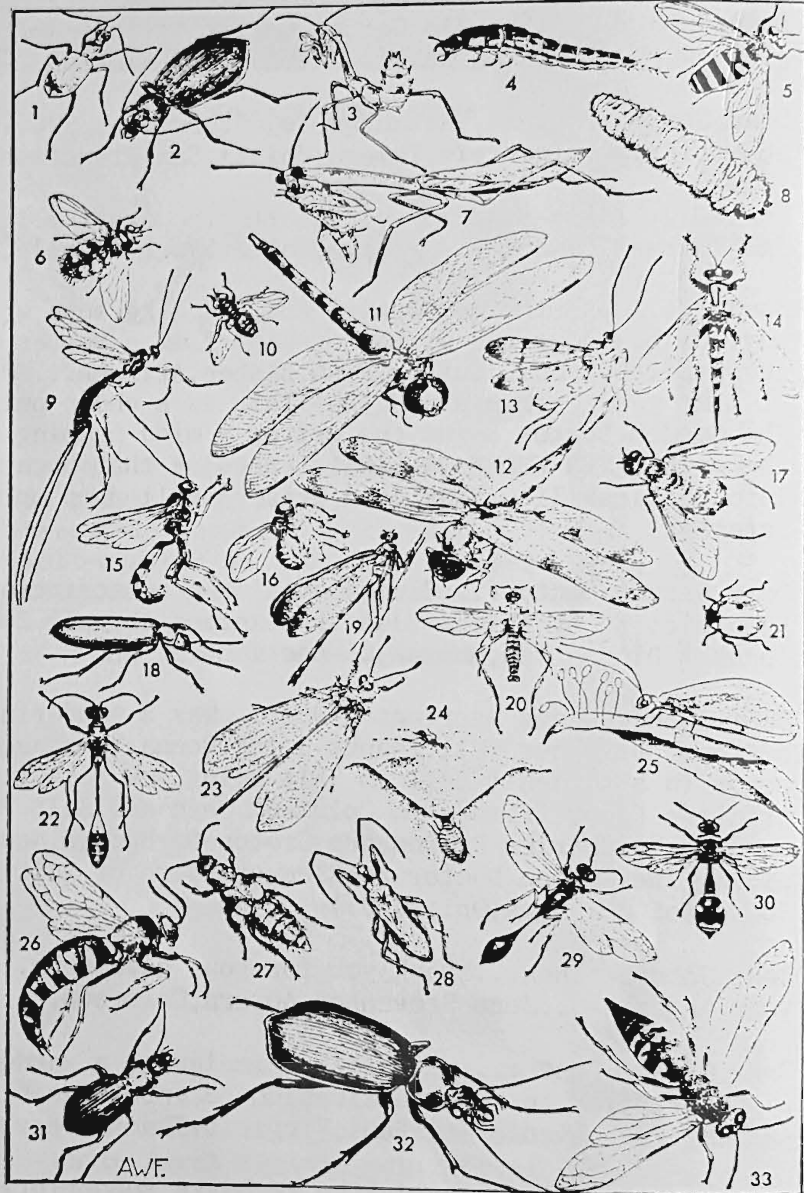
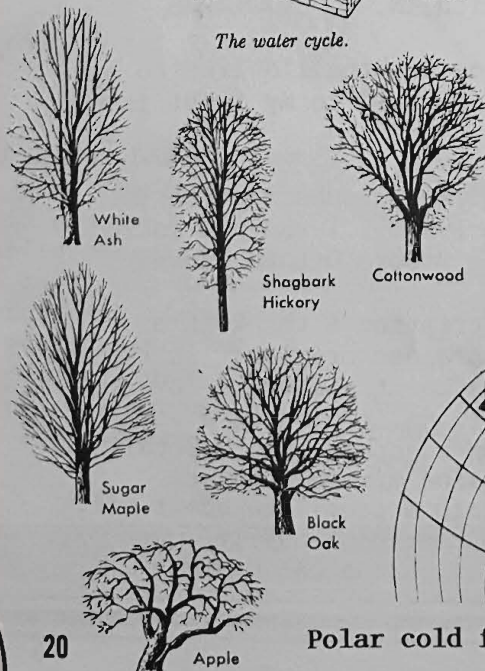




Four Stages in the Life of the Elm-Leaf Beetle.

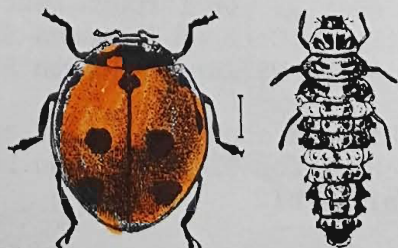


The water cycle.

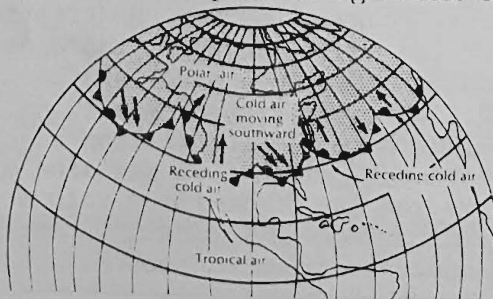


**BENEFICIAL INSECTS**

1. Tiger beetle, genus Cicindella
2. Fiery hunter, Calosoma calidus
3. Praying mantis nymph
4. Ground beetle larva
5. Syrphus or hover fly
6. Tachina fly, genus Winthemia
7. Praying mantis, Paratenodera sinensis
8. Syrphus fly larva
9. Ichneumon fly, genus Ephialtes
10. Tachina fly, Alophora diversa
11. Darning needle, Anax junius
12. Dragonfly, Libellula semifasciata
13. Scorpion fly, Panorpa rufescens
14. Assassin fly, genus Erax
15. Ichneumon fly, genus Amblyteles
16. Big-headed fly, genus Pipunculid
17. Bee fly, Villa alternata
18. Spanish Fly, Lytta vesicatoria
19. Damsel fly, genus Agrion
20. Dance fly, genus Empis
21. Ladybug, Adalia bipunctata
22. Digger wasp, genus Ammophila
23. Ant Lion, Hesperoleon abdominalis
24. Ant lion larva and pit
25. Lacewing, Chrysopa, with eggs
26. Digger wasp, Bembidula quadrifasciatus
27. Rove beetle, genus Staphylinus
28. Assassin bug, Sinea diadema
29. Mud dauber, genus Scleriphron
30. Potter wasp, genus Eumenes
31. Ground beetle, genus Pterosticus
32. Caterpillar hunter, Calosoma scrutator
33. Cicada-killer, Sphecius speciosus



Ladybug and larvae; both eat aphids, spider mites and their eggs. These and other beneficial insects help control plant-eating insects for us.



Polar cold fronts bring winter storms



# ITALIAN HERBS

by  
Reba  
Derchy



**R**osemary, a perennial member of the mint family, loves full sun, a well-drained alkaline soil, and deep but infrequent waterings. It can be grown outdoors in mild regions like southern California and most of Florida, but since it does not tolerate temperatures below 27 degrees F., it must be grown in a pot in colder regions. Use a 10" pot (this herb can become a 3 foot tall woody shrub) with a few inches of coarse gravel on the bottom to aid drainage, then fill the pot to within 3" from the top with a soil mixture like: **1 PART COMPOST OR COMPOSTED HORSE POOP, 1 PART COARSE BUILDER'S SAND, 1 PART DRY GRASS CLIPPINGS OR CHOPPED HAY OR CRUSHED DRY LEAVES, PLUS 1/10 PART CRUSHED LIMESTONE OR CRUSHED EGGSHELLS OR CRUSHED SEASHELLS** (to insure a "sweet" alkaline soil condition.)

Set your young rosemary plant 1 INCH EXTRA DEEP into the soil mixture in the pot, slowly add 1 gallon water to settle the soil and reduce transplant shock, then mulch the entire soil surface around the plant with 2"-3" of organically grown grass clippings, chopped hay or rinsed seaweed if you live by the coast. Two or three light feedings a year with a little chicken poop, manure tea, compost tea or fish emulsion is adequate for this tough plant; the concentration of the flavorful oils in the leaves is increased if rosemary is starved a little and kept quite dry.

To harvest, cut off lengths of branch and use your fingers to strip off the narrow leaves. Dry them in the shade on paper or screen, and store in a tightly sealed jar. Rosemary tea has been taken for centuries as a relaxant and sleep aid. A strong tea makes a fine mouthwash, hair and facial rinse, flea-repellent dip for pets, mosquito repellent, and pest repellent spray for your garden.

It is easier to fight for one's principles than to live up to them.

Alfred Adler



# MARY TSE-TUNG'S

LITTLE PINK BOOK  
of cool addresses to write to!!!

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Nobody holds a good opinion of a man who has a low  
opinion of himself. Anthony Trollope 1815-1882

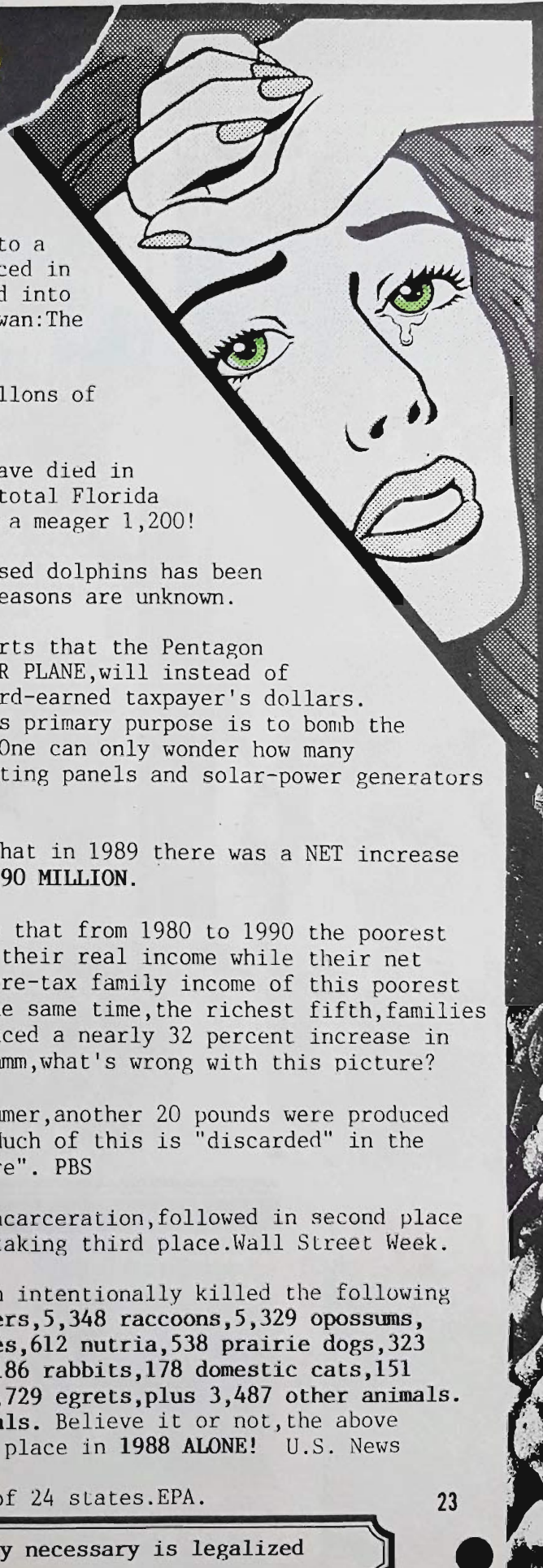
PESTICIDES DO THE  
DARNDEST THINGS

by Bart Sinkwetter

A 1987 study at the University of Southern California, sponsored by the National Cancer Institute revealed that children living in homes where household and garden pesticides were used had a 700% increase of the likelihood of developing childhood leukemia.



# BAD NEWS



Taiwan raises 14 million pigs annually for their flesh;each animal produces 6 times as much feces as does an adult human.Only 1 home in 50 is connected to a sewage treatment plant,so all the human waste produced in the other 49 homes,plus ALL the pig manure,is dumped into bays,lakes,rivers and the ocean. Judy Woodruff,"Taiwan:The Other China". PBS

About 240 million tires,each containing about 2½ gallons of petroleum,are discarded annually in the U.S. alone.

A record number of manatees,160,were confirmed to have died in Florida waters during 1989.Biologists estimate the total Florida population of these endangered marine mammals to be a meager 1,200!

So far during 1990 the mortality rate for bottle-nosed dolphins has been 400% higher than normal in the Gulf of Mexico.The reasons are unknown.

Representative James A. Traficant Jr. (D-Ohio) reports that the Pentagon admits the actual cost of the B-2 Stealth bomber,PER PLANE,will instead of "just" being \$530 MILLION,be closer to 1 BILLION hard-earned taxpayer's dollars. The B-2 has been called an "ash bouncer" because its primary purpose is to bomb the Soviet Union AFTER an exchange of nuclear missiles.One can only wonder how many government buildings could be fitted with solar heating panels and solar-power generators for the cost of just one such "ash bouncer".

Lester Brown of the World Watch Institute reports that in 1989 there was a NET increase in the human population of this strained planet of 90 MILLION.

The nonpartisan Congressional Budget Office reports that from 1980 to 1990 the poorest 20 percent of Americans saw a 3 percent decline in their real income while their net Federal taxes INCREASED by 16 percent.The average pre-tax family income of this poorest fifth of Americans is just \$7,725.However,during the same time,the richest fifth,families with an average pre-tax income of \$105,209,experienced a nearly 32 percent increase in income & a 5.5 percent DROP in their tax rates.Hmmm,what's wrong with this picture?

For every pound of trash we each discard as a consumer,another 20 pounds were produced during the manufacturing and distribution process.Much of this is "discarded" in the form of air and water pollutants."Fueling the Future". PBS

The Soviet Union has the world's highest rate of incarceration,followed in second place by South Africa with The United States of America taking third place.Wall Street Week.

The federally-funded **Animal Damage Control** program intentionally killed the following creatures: 76,033 coyotes,15,239 skunks,9,143 beavers,5,348 raccoons,5,329 opossums, 5,195 foxes,1,163 bobcats,939 badgers,799 porcupines,612 nutria,538 prairie dogs,323 muskrats,289 bears,258 marmots,203 mountain lions,186 rabbits,178 domestic cats,151 domestic dogs,4,453,842 blackbirds,7,982 pigeons,6,729 egrets,plus 3,487 other animals. It "inadvertantly" killed another 6,448 other animals. Believe it or not,the above carnage,which totals 4,600,536 animal deaths, took place in 1988 ALONE! U.S. News

20 pesticides have been found in the ground water of 24 states.EPA.

Collecting more taxes than is absolutely necessary is legalized robbery. Calvin Coolidge



A. Too much acid in the 70's.

B. His underwear is too tight.

C. He's the editor of **The Garden Doctor** and is delighted with the rave review of it that appeared in the March 1990 issue of **East West**.

WHY IS THIS MAN SMILING?

**All of the above.** As creator and editor of **The Garden Doctor** John Starnes fills his days and mind (what's left of it) with putting together the hand-colored, ad-free, seed-filled environmental gardening magazine that **East West** said "presents serious and useful information in a manner that is purely enjoyable". The kind review concludes by saying... "Because of production costs and their "no ads" policy, **The Garden Doctor** sells for a steep \$24 for four issues. The magazine is so much fun to read, though, and packed with so much information, that it's well worth it".

Keep that man smiling and **The Garden Doctor** alive by sending \$24 for 1 subscription, plus just \$18 for each additional gift subscription **TODAY** to:

**THE GARDEN DOCTOR 1684 WILLOW, DENVER, COLORADO 80220 1-303-388-4731**