

Permaculture Network In Malawi

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Did you Know?

A comprehensive search of known plants for medicinal chemicals is an enormous task. Of the estimated 250,000 plant species on earth, only 2% have been thoroughly screened for chemicals with potential medicinal use. Because native plant habitats are destroyed almost daily, many medicinally valuable plants will be gone before scientists can even investigate them.

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Food is Medicine!

Quality of life depends on the quality of our health, and the quality of our health depends on the quality of our environment. Permaculture gives us the tools that we need to improve all three of these things. Nature provides us with everything we need as long as we are thinking ahead and planning for what our needs are. Two of the most important things to include in our Permaculture systems are: Food & Medicines. Food give us the nutrients that we need to grow, build our bodies, and stay healthy. The wider variety of foods that we eat the more likely we are to get all of the nutrients that our bodies needs. **DIVERSITY** is the key. Permaculture teaches us to plant a diversity, it also encourages us to eat a diversity. If we limit our diets to one or two foods, we are starving our bodies of essential nutrients. This can lead to disease. Our immune systems are what work to keep diseases out of our bodies and heal us quickly if we do end up getting sick. An immune system is just like any other living creature it needs to be fed, taken care of , and nurtured in order to stay strong. Nutrition plays a key role in this.

In Malawi, the reduction of disease has become a focus of many organizations. There are people who work on fighting HIV/AIDS, malaria, TB, cholera, malnutrition-related diseases, and many others. All of these diseases have a relationship to the environment and our immune systems. The healthier that both are, the less impact diseases will have on us. So you can start to see that food is

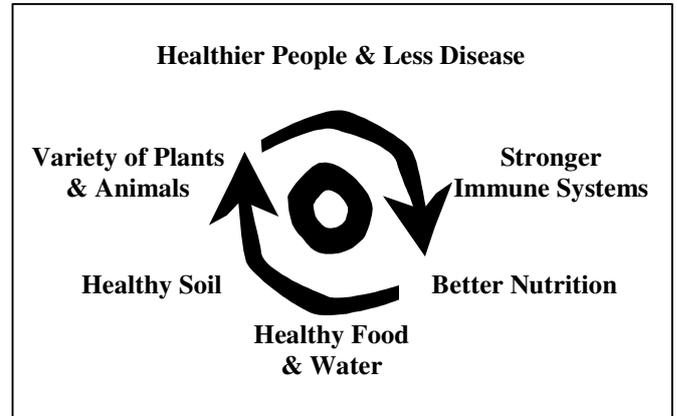
medicine! All foods help to keep us healthy and sustain our lives. Permaculture shows us how to grow these foods while also healing the environment and making it healthier for future generations.

Some plants and foods have specific medicinal uses. For thousands of years people have relied on these plants to help them heal more quickly. This knowledge was passed down from generation to generation. Information of this sort is extremely valuable since some plants can be poisonous if not used correctly. Unfortunately, this knowledge is now being lost. Many people view “Westernized” medicines as being better than the plants that their ancestors used, but did you know that almost 40% of all prescription drugs come from plants? Many of these drugs have more severe side effects than when people use the whole plant.

In this issue, we will take a look at some of these medicinal plants and foods. We will also show how they can be incorporated into a Permaculture system and used to improve our health and the health of the environment. Instead of ignoring all of the gifts that nature gives us, let's start to celebrate its bounty and learn to use them wisely. This can have a tremendous impact on the problems that we are facing. 🌍

Good Health Does Not Need to Be Imported

Many development organizations focus on improving the health of populations by collectively spending millions of dollars on importing medicines, health care systems, training, food aid, nutrient supplements, and fortification. But inside each of our bodies we have a free, built-in system to defend us from diseases that try to enter and to heal us from the ones that do make it in. To work properly, the immune system must get the nutrients it needs from a variety of different foods. But the food people eat is only as healthy as the soil that produces it. Just like humans, the soil becomes unhealthy if it 'eats' only one type food and is not re-supplied with a wide variety of organic matter containing the required nutrients. This variety of organic matter can only be obtained when people plant and grow a range of crops. As the soil improves and more organic matter is present, this also helps allow water to sink into the ground and be filtered as it passes through the different layers of the earth, so that by the time it reaches our drinking water wells it is free from bacteria and other organisms that cause illnesses. We refer to these connections as "The Cycle of Better Living:"



- When we have healthy soil through a variety of plants and animals,
- We have healthier food and clean drinking water;
- Healthier food and water give us better nutrition;
- Better nutrition strengthens our immune systems;
- When our immune systems are strong they help protect us from disease and stay healthy. 🌍

History of an Earache

"Doctor, I have an ear ache."

- 2000 B.C. "Here, eat this root."
 1000 B.C. "That root is heathen, say this prayer."
 1850 A.D. "That prayer is superstition, drink this potion."
 1940 A.D. "That potion is snake oil, swallow this pill."
 1985 A.D. "That pill is ineffective, take this antibiotic."
 2000 A.D. "That antibiotic is artificial. Here, eat this root."

Did You Know?

- Twenty percent of China's plants are used in medicine.
- Twenty thousand plants are listed by the World Health Organization as being used for therapeutic purposes.
- It takes 4,000 crocuses to produce a single ounce of saffron. Saffron is used to color and flavor foods, and was formerly used as a dyestuff and in medicine.

Always Something to Eat with Permaculture! (and now with medicinal benefits!)

In addition to providing us with nutrients, foods also provide us with medicine. Some foods work to boost our immune systems as we discussed on pages 1 & 2. Other foods work to remove or balance harmful substances in our bodies such as free radicals, chemicals or certain types of fat. Still other foods help to improve our digestion and help to keep our intestines healthy which can improve its ability to keep disease causing substances out of our bodies. The following 3 foods are examples of how foods can both provide us with important nutrients and medicines – all in one bite!

Chichewa: Mpungabwe
Scientific: *Ocimum basilicum*
English: Wild Basil
Edible Parts: Leaves
Food Group: Vegetable

Chichewa: Tsobola
Scientific: *Capsicum annum*
English: Peppers
Edible Parts: Fruits (ripe / unripe)
Food Group: Vegetable

Chichewa: Adyo
Scientific: *Allium sativum*
English: Garlic
Edible Parts: Stalks, root bulbs
Food Group: Vegetable

Description: A small annual herb with very strong menthol smelling leaves. Grows well in hot sunny areas, especially along the lakeshore. Can be propagated easily from seed.

Uses: The leaves can be eaten raw in salads or used to add flavor to soups, meat, and other foods. Medicinally, the leaves can be crushed and their strong smell is inhaled to alleviate seizures, congestion, and coughs. The plant may also be applied to the skin or burned to keep away mosquitoes.

Nutrition: Like most dark green leaves, wild basil is high in the micronutrients including the vitamins A, B & C, and the minerals calcium and iron. Leaves also have fiber, which is not a nutrient (not necessary for life according to scientists) but it is important for keeping our digestive system healthy. Dark green leaves are also a good source for a little protein.

Description: There are many varieties of peppers in Malawi. They generally grow into small shrubs that can continue to grow for up to five years. They prefer sunny areas but also do fine in lightly shaded areas. They grow well from seed and birds will often help you to spread them. Once established in an area peppers can self-seed in this manner, so watch out for little seedlings!

Uses: The fruits add a spicy hot flavor to food. Medicinally, the peppers are rich in vitamins and help to stimulate digestion, circulation, and the sensory nerves. They can also help to ease sore throats and headaches. Most nutrient lists also include the leaves as a source of nutrition, has anyone out there prepared and eaten the leaves as food? Write in and let us know!

Nutrition: Red peppers are extremely high in vitamin A and a good source for vitamin C – both of these vitamins are important for boosting our immune system. Peppers also have fiber.

Description: Garlic is a root crop that produces a papery bulb of sectioned fruits with soft green shoots on the top. Garlic is grown by planting these sections.

Uses: The bulb sections are used to add flavor to foods. The best way to get the nutrients and medicinal benefits is through raw garlic. The stalks may be used similar to onion tops in fresh salads or in cooking. Medicinally, garlic helps to purify the blood, lower blood pressure, and reduce clotting. It has an antibacterial property and can aid in treating sore throats, bronchitis, and TB. The crushed bulbs may also be applied externally to infected areas.

Nutrition: Garlic is a good source for fiber with each 100 gm portion containing about 10 percent of what an adult should eat for fiber in a day. This may not seem like a lot, but if you use a bulb of garlic a day like we do along with some peppers & wild basil in your dishes it adds up fast! Garlic has some vitamin C and minerals, too.

Herbal Medicine...Knowledge Too Important to Lose

Herbs have been relied upon for the healing of ailments for thousands of years. The focus of herbalism is to support the body's self healing ability. Herbs nourish us physically, mentally, emotionally, and spiritually. Herbs are strong foods, so by eating them we enrich ourselves with a vast array of nutrients. The classification of herbs is a science which has been refined over the last 3000 years.

Evidence of the use of herbal remedies goes back some 60,000 years to a burial site of a Neanderthal man uncovered in 1960. In a cave in northern Iraq, scientists found what appeared to be ordinary human bones. An analysis of the soil around the bones revealed extraordinary quantities of plant pollen that could not have been introduced accidentally at the burial site. Someone in the small cave community had consciously gathered eight species of plants to surround the dead man. Seven of these are medicinal plants still used throughout the herbal world.

The invention of writing allowed the knowledge of medicinal plants to be recorded and shared with people. The first written records detailing the use of herbs in the treatment of illness are the Mesopotamian clay tablet writings and the Egyptian papyrus. About 2000 B.C., King Assurbanipal of Sumeria ordered the compilation of the first known materia medica containing 250 herbal drugs (including garlic, still a favorite of herbal doctors). The Ebers Papyrus, the most important of the preserved Egyptian manuscripts, was written around 1500 B.C. and includes much earlier information.

It contains 876 prescriptions made up of more than 500 different substances.

Today, many of our prescription medicines (up to 40%) are based on components that have been extracted from plants.

Unfortunately, there has been a shift in the way that people view medicinal plants and traditional healers.

Africa has had a long history of traditional medicine, but with the

introduction of "foreign" drugs many of these plants are now viewed as

inferior. Plants that once provided healing properties to people free of charge are now collected from African countries, processed into pills, capsules, tablets, or other forms and then sold back to people at a cost. Many view these medicines as being better because they have come from a different country.

There are efforts being made to reverse this trend. The Traditional Healers in Malawi have now come together to form an association. This group helps to ensure that the correct plants are being used in the correct amounts. It also helps to protect and share the knowledge that these healers have accumulated over many hundreds of years by listening to their ancestors. Much of this knowledge has already been lost. As people began to lose interest in medicinal plants, many of the older Malawians have never had a chance to share their information with the younger generations. When an elder dies it is like an entire encyclopedia of knowledge dying with them. This means that the knowledge of important things

like how to use plants for healing, which plants are edible, and which plants can harm you is also disappearing. Each year now the newspapers carry stories of people who have died from eating or using the wrong plants. This is a sign that we are not respecting, sharing, and celebrating in the power of plants.

One Permaculture motto is "Observe, Learn, and Share". This doesn't mean we have to do all of the work for ourselves. Many generations of people have already done a great deal of observing and learning. If we learn how to share with one another, we can build on this knowledge and use it to benefit ourselves and the generations to come. The next time you are visiting with your grandparents or elders take time to ask them about some of the things that they know...you may be surprised. Use this knowledge, protect it from being lost, and share it with others. They say that "Knowledge is Power", but only when this knowledge is shared.

There are many examples of people using this knowledge of medicinal plants and foods to improve health in Malawi. Medicinal herb gardens, community gardens, home-based care programs, and individual plots have all been established throughout the country that are utilizing medicinal plants. You don't have to be a doctor to eat a bulb of garlic or drink a glass of lemon grass tea. There are many things you can do to improve your health, and with the incorporation of a few common medicinal plants and a diverse diet of all the food groups this job is made even easier. 🌱



Africa has had a long history of traditional medicine...

Member Focus...The Great Trek *by Leo Kuwani*

This paper documents a brief report of the Great Trek done from October 5th-22nd, 2002 by the Permaculture Network in Malawi's founding members: June Walker of Monkey Bay, Jamestar Langwani of Masenjere, Leiza Dupreez of Livingstonia, Justice McBetha of Changoima, Leo Kuwani of Migowi, and joined by Shiela Steven a management consultant from the United Kingdom.

On 19th October, 2002, at Livingstonia, Jamestar, Leo, and Leiza ratified decisions taken on the 12th of October, 2002 at Monkey Bay by Justice, Leo, and Jamestar to reformulate the Permaculture Network of Malawi. June Walker is to step down on 31st December, 2002 from Leadership of the Network.

The Network has four trainers: Jamestar, Leo, Justice, and Leiza who all provide trainings in Permaculture. It was agreed that the four trainers would become joint co-coordinators of the reconstructed Network.

Tour of Malawi

The Government of the Netherlands and Limbe Leaf supported the tour of Malawi from Nsanje in the south to Livingstonia in the North. The purpose of the tour included:

- To test out the relevance and usefulness of a series of posters as teaching aids illustrating Permaculture practices in Malawi
- To inspect the work being done in trained people's gardens following their training courses
- To discuss matters of organization following June Walker's retirement
- To agree on issues of leadership

and control

The trainers were clear that the most urgent need of the Network is for more trained trainers to be linked within each region of the country. The four who are the National Coordinators are to hold a joint Training for Trainers Course between May and July 2003 for 20 people who have already attended a Design Course and have shown good Permaculture practices. The trainees progress will be monitored and the most important thing will be to build up trust and respect between the Coordinators.

Coordinator's Responsibilities:

- **Communications**—Leiza Dupreez
 - **Reports**—To be prepared by Justice McBetha with input from the other Coordinators
 - **Accountability for Funds**—Network funds full accounts will be submitted to Jamestar Langwani with signatures of all the Coordinators
 - **Proposals for Training Activities**—To be submitted through Leo Kuwani
 - **Permaculture Newsletter**—The Nordins will continue this service
- (By mid 2004, there should be a cadre of between 20 to 30 trainers)

More Distant Future:

1. **NGO's**—There will be one trainer charged with the task of nurturing relationships with NGO's
2. **Relationships with the Government of Malawi**—One trainer will look into the relationships with the Ministry of Agriculture
3. **General Publicity**—There will be one trainer to take charge of modernizing

communications to ensure that news about Permaculture gets into newspapers, TV, radio, etc.

4. **Permaculture in the Schools Curriculum**—Leo Kuwani has already established links with the scheme that Zimbabwe offers for training schools, young people, and colleges. When there are more accredited trainers available it is possible to do similar work in Malawi.

Places Visited:

People on the Great Trek visited the following places:

- Changoima in Chikwawa District
- Masenjere in Nsanje District
- Likulezi, Chiringa, Matawa, and Khongoloni in Phalombe District
- Liwonde Nursery for fruits in Balaka District
- Malindi, Makawa, Monkey Bay, and Thanthwe in Mangochi District
- Mua, Nankokwe, and Mtendere in Dedza District
- Chitedze in Lilongwe District
- Tikondwe Freedom Gardens of Dr. Glyvins Chinkhuntha in Dowa
- Mbowe, Luwanga, and Mzuzu in Mzimba District
- Lukwe, Livingstonia in Rumphi District

Things seen were very promising and encouraging for enhancing the promotion and sustaining nature through:

- The making of compost, swales, pit beds, and mulching.
- The use of human and animal manure as witnessed at Nordin's and Dupreez
- Dams, trenches, and ponds as sources for water storage for

(Continued on page 7)

Traditional Medicine in Africa

The following excerpts are taken from a paper published by the Conserve Africa Foundation (CAF).

In all countries of the world there exists traditional knowledge related to the health of humans and animals. According to the World Health Organisation (WHO) the definition of traditional medicine may be summarized as the sum total of all the knowledge and practical, whether explicable or not, used in the diagnosis, prevention and elimination of physical, mental or social imbalance and relying exclusively on practical experience and observation handed down from generation to generation, whether verbally or in writing.

In the past, modern science has considered methods of traditional knowledge as primitive and during the colonial era traditional medical practices were often declared as illegal by the colonial authorities. Consequently doctors and health personnel have in most cases continued to shun traditional practitioners despite their contribution to meeting the basic health needs of the population, especially the rural people in developing countries. However, recent progress in the fields of environmental sciences, immunology, medical botany and pharmacognosy have led researchers to appreciate in a new way the precise descriptive capacity and rationality of various traditional taxonomies as well as the effectiveness of the treatments employed. Developing countries have begun to realise that their current health systems are dependent upon technologies and imported medicine that end up being expensive and whose supply is erratic.

Traditional medicine has been

described by the World Health Organisation (WHO) as one of the surest means to achieve total health care coverage of the world's population. In spite of the marginalisation of traditional medicine practised in the past, the attention currently given by governments to widespread health care application has given a new drive to research, investments and design of programmes in this field in several developing countries.

Most developing countries are endowed with vast resources of medicinal and aromatic plants. These plants have been used over the millennia for human welfare in between man and his environment continues even today as a large proportion of people in developing countries still live in rural areas. Furthermore, these people are precluded from the luxury of access to modern therapy, mainly for economic reasons.

The demands of the majority of the people in developing countries for medicinal plants have been met by indiscriminate harvesting of these plants, including those in forests. As a result many plant species have become extinct and some are endangered. The continent is estimated to have about 216,634,00 ha. of closed forest areas and with a calculated annual loss of about 1% due to deforestation, many of the medicinal plants and other genetic materials become extinct before they are even documented. Africa has one of the highest rates of deforestation in the world; for example, Côte d'Ivoire and Nigeria have 6.5% and 5.0% deforestation per year, respectively, as against a global rate of 0.6%. Habitat conversion threatens not only the loss of plant resources but also traditional community life, cultural diversity, and the accompanying

knowledge of the medicinal value of several endemic species. A majority of the plants found in Africa are unique to the continent.

Undoubtedly, medicinal plants and the drugs derived from them constitute great economic and strategic value for the African continent.

Many plants are used for their therapeutic values and this has a twofold effect on the world's flora. On one hand, the demand for herbs, particularly in parts of Africa, has brought some plants near extinction. Even the simplest plant may have a future importance that we cannot predict. Efforts to develop drugs from medicinal plants should address diseases and health problems seen in developing countries as well as diseases which primarily affect developed countries' population. Saving the world's plant resources calls for more protection and management, more research, and an increasing level of public awareness about our vanishing heritage.

Indigenous and local communities are concerned that the rate of *knowledge erosion* has never been so high as it is in the current generation, and that such knowledge erosion poses an even more serious threat to the conservation of biological diversity than resource erosion.. There is, therefore, an urgent need to formulate incentive measures to ensure that members of the younger generations will want to learn, value, adapt and apply the traditional knowledge, innovations and practices of their elders.

It is important to note that even in contemporary rural Africa, there is no doubt about the efficacy of herbal medicine. Many Africans, especially rural people and the urban poor, rely on the use of

herbal medicine when they are ill. In fact, many rural communities in Africa still have areas where traditional herbal medicine is the major and in some cases the only source of health care available. Thus there can be no doubt about the acceptability and efficacy of herbal remedy within African society.

However, in many oriental countries, traditional medicine is officially recognized. China, for example, is able to provide adequate and constantly improving health care coverage for its vast urban and rural population precisely because it harnesses the precious legacy of traditional medicine.

Consequently, the inability of most African countries to

develop their own legacy of traditional medicine, because it is denied official recognition, is partly responsible for the current health care crisis in Africa.

In many African societies both traditional and modern health systems exist. Normally people consult both systems, though for



different reasons and during different stages of the disease. Certain diseases are believed to be better treated by one of these systems; In spite of increased interest in the technical aspects of traditional health care, forms of true co-operation between the two systems are rare. Traditional healers may refer to modern medicine, but the reverse is rarely the case. There is a tendency in the Western oriented biomedical tradition to focus on the risks and downplay traditional African medicine and the expertise of traditional healers. We cannot deny the drawbacks of traditional medicine, which include incorrect diagnosis, imprecise dosage, low hygiene standards, the secrecy of some healing methods and the absence of written records about the patients. Though there is certainly cause for concern, it is unfair to pass judgement on African healing systems on the basis of their worst outcomes.

CONCLUSION:

Governments should establish the necessary institutional and financial support to promote the potential role of herbal medicine in primary health care delivery. Priority should be given to the

development of herbal medicine by means of the following measures:

- inventorying and documenting the various medicinal plants and herbs which are used to treat common diseases in each country;
- establishing local botanical gardens for the preservation of essential medicinal herbal plants in different parts of each country, in order to ensure a sustainable supply of safe, effective and affordable medicinal herbs;
- setting up testing laboratories with adequate facilities for the assessment of the efficacy of medicinal herbs, and establishing dosage norms for the most efficacious use of herbal extracts, whether in tablet, capsule, powder, syrup, liquid or other form.🌍

(Continued from page 5)

plants, future use, and for fish farming to feed the farm and the family—where various animals and plants such as fish, bananas, sugar cane, maize, and vegetables were all intercropped as witnessed at Dr. Chinkhuntha's

- Companion planting and microclimates within Permaculture zones
- Farmers working cooperatively—building dams, afforesting degraded land, buying cattle and poultry to share with its members as witnessed in various places

including Cangoima (Where my teacher/trainer Justice Betha is. I always respect him for the training and the work well done. Keep it up Justice!)

- Women have shown great interest in Permaculture in Malindi, Changoima, Masenjere, Khongoloni, Chitedze, Luwinda, Tikondwe, and Monkey Bay just to name a few

The Trek was a success and opened the eyes and minds of the trainers and are to emulate what they have seen during the tour. For example, Leo Kuwani has

constructed a dam whose objectives are:

- To harvest water to be used in the dry season
- To plant fruit trees around the dam since there will be enough moisture around the area throughout the year
- (He is also practicing the Nordin's composting toilet!)

We thank June Walker for all the road she has paved for us and are very grateful to her. Please continue to guide us when you are free.🌍

GROW FOOD AND MEDICINE IN THE CITIES, GROW IT EVERYWHERE

Thoughts from June Walker

For many many years, keen housewives have grown plants in tins and pots on their khondes at the front of the house to make their home look more attractive and cool to live in. The idea is there, the skills are there, but where is the food and medicine? These plants can look just as attractive as flowers and shade plants do. They need the same containers of good soil and compost, mulch, watering, as the flowers, can provide shade as climbers, keep the house cooler and increase our goal of *FOOD SECURITY AND HEALTH AT A HOUSEHOLD LEVEL*. Choose plants which grow well locally in the dimba, mix the plants to build

a guild wherever possible with feeders, climbers, protectors, ground covers as well as leaf crops and tomatoes. But, why damage the foundations of your house by sweeping away the soil and exposing the brickwork underneath when you could be growing useful plants? Collect used cartons, old baskets, even plastic bags and maize bags. Fill them with good soil and compost, make a few drainage holes in any plastic bags; stand them close together along the wall of your house and fill them with different food and medicinal plants. Harvest rain water from your roof, use gray water from the house, poured through sand if it is soapy or greasy. If you don't like

the appearance of your container garden, you can look for something locally available to make a wall in front of the bed, stones, broken bricks with mud mortar, sisal, whatever you see lying around. Once you have done this, you will have made a garden at arm's reach that will give you fresh vegetables and healing medicines every day of the year. Enjoy! 🌱

Avocado Leaves For Better Blood

Anemia is a condition when the blood is lacking red blood cells. These cells carry the oxygen you breathe throughout your body. If there is not enough red blood cells you will feel tired and you will not be able to work hard. In Malawi when this happens, you may hear people saying that a person has "no blood". There is still blood, but part of it isn't working properly. Various things can contribute to this condition: malaria, pregnancy, and not eating enough iron-rich foods are just a few of these.

The best way to remedy this situation is to eat more foods rich in iron: dark green leaves, beans, nuts, oilseeds, and animal meat. These include foods like: bonongwe (*amaranth*), chisoso (*blackjack*),

mamunaligone, mlozi, khalowa (*sweet potato leaves*), nkhwanya (*bean leaves*), and n'khwani (*pumpkin leaves*), nyemba (*beans*), mkungudzu, kalongonda, kakumpanda, mpendedzuwa (*sunflower*), nthanga (*pumpkin seeds*), chitowe (*sesame*), ngumbi (*termites*), mazira (*eggs*).

Vitamin C helps absorb iron from plant foods so eating foods with vitamin C help you to recover fast. These include: ndimu (*citrus fruits*), malambe (*baobab*), mango, magalagadeya (*passion fruit*), and other "tart" tasting fruits.

Avocado Leaves (*Mapeyala*)

Studies have been done that show drinking a tea made from the leaves of Avocado leaves can help to

reduce the effects of anemia. To make this tea, simply take 2-3 large leaves per cup of tea, cut into pieces, boil for 10 minutes, strain leaves and drink. You can add a bit of honey or sugar for sweetness, and a squeeze of lemon or lime juice will also add a bit of vitamin C. Drink 2-3 cups of this tea a day and it should help to improve the iron levels in your blood. Avocado leaves may also be harvested and solar dried to make tea all year long, or to mix with other things like lemon grass, chidede (*sorrel*), or mint. 🌱

Did you Know?

The deadliest plant in the world is the castor bean plant (*Msatsi*). It is estimated that the protein, ricin, found in the castor bean plant is 6,000 times more poisonous than cyanide, but the toxins remain in the seed coat after it is refined, so the oil is commonly sold as a medicine that can be taken internally. 🌱

Herb Spirals...For Health (illustrations from "You Can Have Your Permaculture and Eat it Too")

Land Vs. Space

Many people complain that they do not have enough land to grow all of the things that they need. What many people forget, however, is that nature is very clever in making the fullest use of all its space. One of the major components in a Permaculture guild is the "climber-supporter" combination. This helps to maximize the use of your land as well as your yields. For example, one passion fruit vine (*magalagadeya*) takes up only a small amount of your surface soil, but once it runs up into the highest layers of your trees it can yield thousands of fruits a year. So when people say that they don't have enough land, ask them if they think they have enough space! Think like nature, plant like nature, and your Permaculture garden will flourish...naturally!

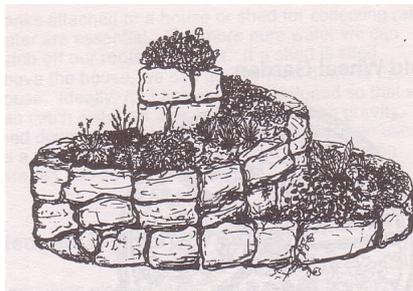
Herb Spirals

Another way that you can save space in your gardens and maximize your harvests is with the incorporation of an *Herb Spiral*. These spirals make planting, watering, and harvesting easier. Best of all, they can be very decorative

and can add beauty to your home or workplace.

Construction

Herb Spirals can be made out of rocks, old broken bricks, clay pots, and even old tires. You will want to be able to reach the middle from all sides so the main base shouldn't be more than 2



Herb Spirals can maximize space

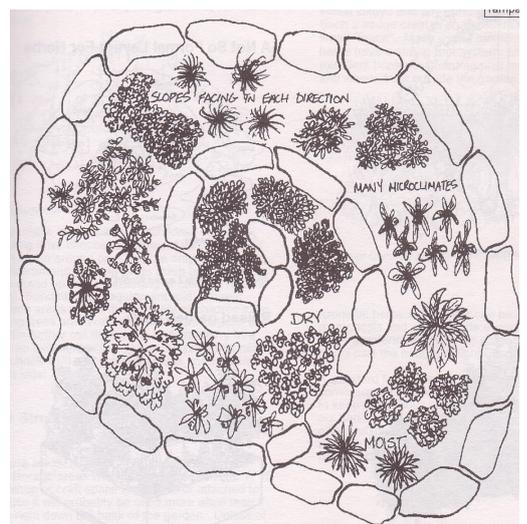
meters across unless you change the design to allow for this. Find an area that

will allow for this size and also provide sunlight for your plants. Lay out the main circle on the ground and then work your way around in a upwards spiral motion until you end up with a raised circular central area. Fill in the spaces with compost and you are ready to plant.

What to Plant

Many people use Herb Spirals to plant things that they use quite often for cooking or medicinally. One of the benefits of a spiral design is that it creates many different microclimates due to its different heights, shapes,

edges, and drainage patterns. This creates many different growing conditions in a small area. The top of the spiral will dry out more quickly than the bottom will, so you will need to choose plants that are suitable for these different layers. Some examples might be: peppers (*tsabola*), basil (*mpungabwe*), mint, lemon grass, sorrel (*chidede*), onions (*anyezi*), garlic (*adyo*), chives, edible flowers, vegetables, local medicines, or whatever else you like to eat or use. You could even add something decorative to the center like a bird bath (made out of an old broken pot or hub cap) to attract beneficial predators to the spiral. Once you have constructed and planted your herb spiral, all that is left is to maintain it and start harvesting for health!🌱



Cassia alata (*mphere* plant) can help to get rid of scabies (*mphere*). This is a plant that you sometimes see grown as an ornamental or along road sides. It is a short shrub that produces large leafed branches, yellow flowers, and winged seed pods that will split into sections. To treat scabies, simply take one branch of leaves and boil the entire branch in water for about 10 minutes. When this water cools, you can apply it directly to a person's skin 2-3 times a day for about three days and it will clear up the scabies (may also be used on animals). It has been said that Health Surveillance Assistants (HSA's) used to carry these branches with them to villages, but it is seldom done anymore these days. Another example of information being lost.

Send newsletter articles to:

Kristof & Stacia Nordin
Newsletter Editors
PO Box 208, Lilongwe, Malawi

Or via e-mail at nordin@eomw.net

To:

Don't forget to plant medicines!

There are many
important local
medicines that people
can be planting and
using to keep us all
healthy.

*Next Issue:
Water*



Permaculture Network In Malawi

PO Box 46, Monkey Bay

*"See the world through the eyes
of Permaculture"*

Interested in Joining ?

As a member you receive bi-monthly newsletters on nutrition, foods, resources, ideas, and contacts of people all over Malawi who are also practicing the sustainable living of Permaculture.

To Join, send your name, address, contact details, profession & areas of interest along with a 300 mk yearly membership fee to:

June Walker, PO Box 46, Monkey Bay Phone/Fax: +265 587-656

Email: junewalker@africa-online.net

Resources

- **Hope Humana** (a program of Development Aid People to People, DAPP) *Located in Lunzu boma, 01-694-229, hopena@sdpn.org.mw*. Hope Humana teaches people to establish community food and medicinal gardens. Their office in Lunzu, Blantyre has lots of gardens and the people that can give more information.
- **National Herbarium and Botanical Gardens** – *The main office is at Livingstone Old Naisi Roads Junction, PO Box 528, Zomba. Tel 01-525-388/118/145, fax 01-524-108, 01-524-893 is the Medicinal Plants Project.* Responsible for the preservation and research of Malawian plants and there is a specific project for Medicinal Plants. They have plants for sale. There is also a branch in Lilongwe at the junction of Kenyatta and Presidential Way near City Centre, *tel 01-775-143.*
- **St Louis Montfort Mission, Balaka** – *PO Box 280, Balaka, 01-545-243/210/267.* The Home Based Care program has a large Medicinal Garden with clinic. Staff gather, process and package medicines for a wide range of diseases and symptoms. It is well worth a visit.
- **Fambidzanai Permaculture Centre** – *4 Dovedale Road, Mount Hampden, PO box CY 301, Causeway, Harare, Zimbabwe. Phone +263-4-336151, 307557, 303188, fambidzanai@mango.zw Town office: 2 Birdcage Walk, 178 Chiapo Ave, Harare, Zimbabwe. tel/fax +263-4-726911.* Resource centre on permaculture and other sustainable technologies. Fambidzanai offers residential courses as well as outreach courses. In the future they hope to conduct some courses with an HIV/AIDS component.
- **CURE** – In the last newsletter we told you about Co-ordination Unit for the Rehabilitation of the Environment (CURE). Ulemu Munthali wrote to update CURE's contact information: *Heritage Centre, World Life Society of Malawi, Limbe. PO Box 2916, Blantyre, Malawi. Tel: +265-0-1-645-757, fax 0-1-643-765.*
- **Does anyone know the contact for the Herbal Association of Malawi or Traditional Healers Association?**