



PLANT THE SEEDS OF LOVE

A beginner's guide to growing your own food and composting

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Aims of Today's Webinar

- Appreciate why it is important to grow our own food
- How we can grow it
- Easy tips, using everyday items
- Through this journey reconnect with Mother Nature!



Why is it important...

1. Helps us truly appreciate the value of food
2. Clean – free from toxins
3. Recycles food
4. Adds nutrition to soil
5. Creates a haven for our animal friends
6. Great form of exercise!
7. Helps us obtain Vitamin D



The Bigger Picture...

- Self-sustainability





The Bigger Picture...



Tapping into solar and geothermal energy

- Free energy
- Lowers footprint

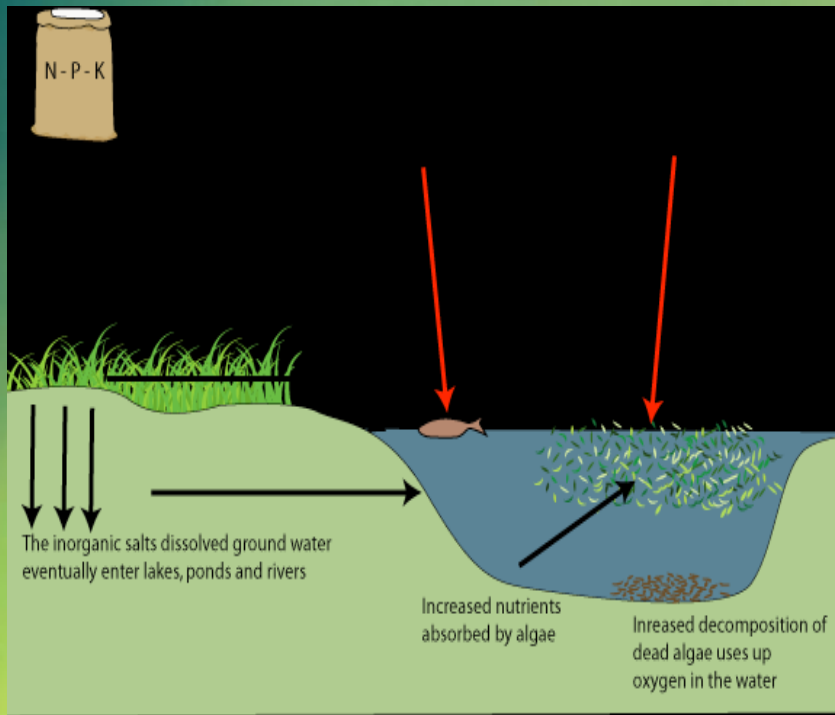


The Bigger Picture...



Returning land back to nature

- Healing the biosphere
- Tackling climate change
- Encouraging biodiversity

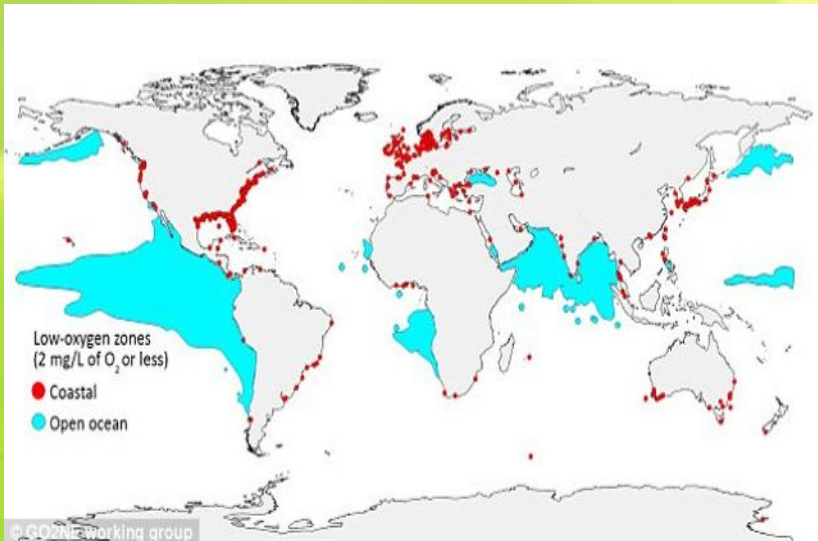


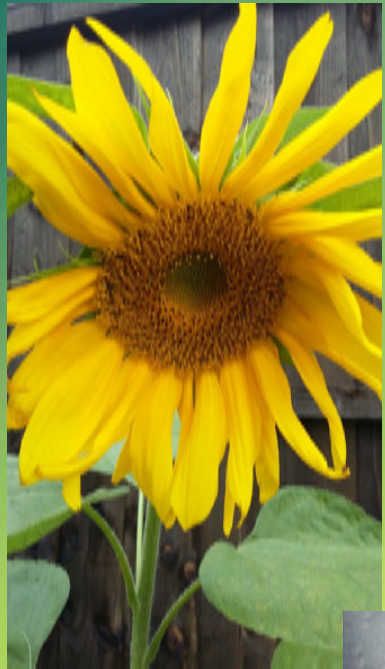
The Bigger Picture...



No artificial fertilizer or toxins

- No use of methane
- No release of nitrous oxide
- Safe for soil organisms or nutrients
- Does not contribute to dead zones
- Safe for bees, birds, hedgehogs, etc.





Enjoyable for All

- Inspiring children to connect with Nature
- Teaching them the importance of food
- Motivation to avoid food waste
- Bonding for the family





Embracing the 4 Eco Principles

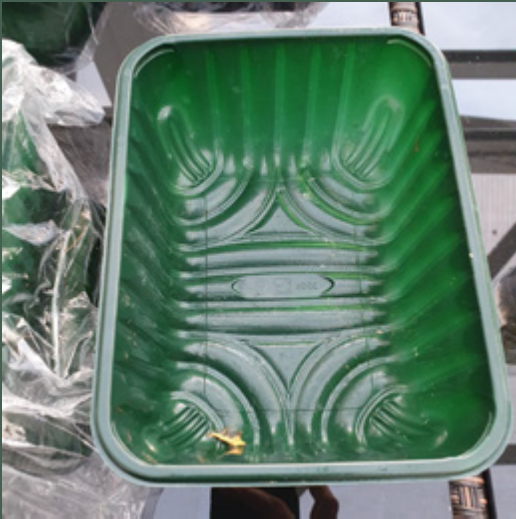
1. Protecting and **increasing life** in the soil
2. Optimally using the **space** we have
3. Using **containers** we would otherwise throwaway
4. In a manner that is **beneficial** to the biosphere



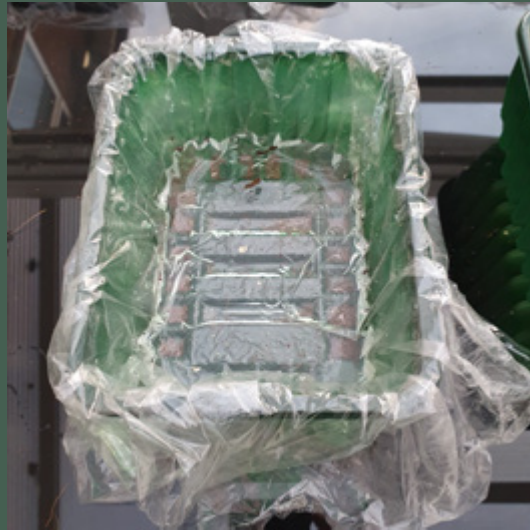
Requirements

- Seeds or used up vegetables
- Containers
- Ready compost
- Topsoil
- Polythene
- Tools
- Markers
- Netting
- Freshwater and sun

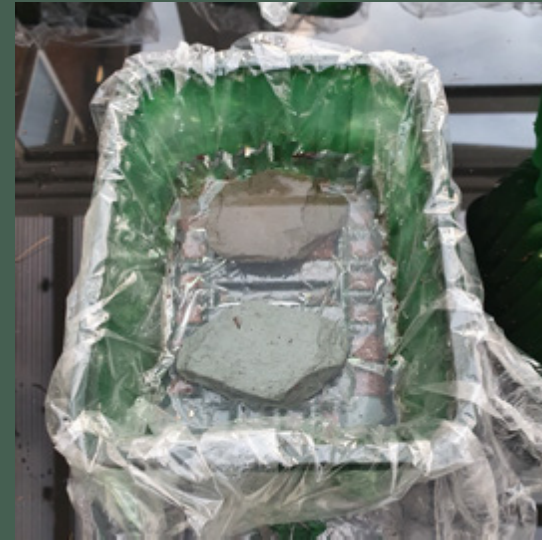
TOP TIP: Containers... Upcycling!



Container with holes



Polythene wrapping



Stones to create reservoir



Container with holes, compost and seeds

TOP TIP: Containers...Make your own



TOP TIP: Containers...Make your own



Markers



TOP TIP: Marking and Netting





Ready Compost

- Plant-based – ‘Fertile Fibre’
- Peat-free
- 30 litres minimum

Understand your Soil

- Add more organic material
- Encourage worms – Help Ever, Hurt Never
- Drainage
- Dig or no dig
- Maintain fertility (green manures)





Green Manures

- Plants that are grown as temporary groundcover
- Converts winter sunlight into organic plant matter
- Dug into the soil as fertiliser
- Tops can be composted
- Leguminous plants are great!



Composting

- **Reduces** waste – everything from the kitchen to garden
- **Recycles** organic matter
- A must have!



Composting Materials

- Raw (uncooked)
- No animal products (dairy, eggs, meat)
- Vegetable and fruit peels, leaves, shoots, roots
- Weeds (Wilt them or keep underwater for 1 month)
- Avoid twigs and thorns
- Cardboard (non-laminated, cut up and wet)
- Paper (cut up and wet)
- Grass clippings
- Nettles



Composting



Composting Q & A

- To turn or not
- How long?
- Maturing the heap
- Small composter – plastic or wood



What to Grow, When to Grow



Things to Consider...

1. Can they be peeled?
2. How much sun does your garden/ balcony receive?
3. If first time, start with easy growers – Spring is the BEST time to start
 - courgettes
 - beans
 - chillies
 - radish
 - kale
 - potatoes

Sowing Seeds – Indoors and Outdoors



Onions: Indoors to Outdoors



Potatoes: Indoors to Outdoors



Growing from 'Scraps' - Mother Nature's Alchemy!



Growing in Containers



- Ensure good drainage
- Good choices = radishes, spring onions, garlic, lettuces, beetroot, French beans
- Herbs = excellent, grown on windowsills
- Ensure adequate ventilation if growing in conservatory



TOP TIP: Boost your Immunity!



TOP TIP: Companion Planting! 😊

- Crops grown together to help each other
- Care must be taken not to crowd plants
- Strong scents of herbs help to hide food plants from pests
- Flowers bring in predators and pollinators
- Discourages fungal and bacterial diseases



Companion Planting : Veggies

Vegetable	Does well with	Does badly with
Broad beans	Brassicas* , carrots, celery, potatoes	Garlic, onions
French beans	Potatoes, sweetcorn, celery	Garlic, onions
Runner beans	Sweetcorn	Beetroot
Beetroot	Beans, brassicas, garlic, onion	Runner beans
Brassicas	Beetroot, nasturtiums, onions, peas	Runner beans
Carrots	Onions, tomatoes, garlic	
Celery	Brassicas, tomatoes	
Courgettes (zucchini)	Beans, nasturtiums, peas, sweetcorn	Potatoes

*Brassicas: also, cruciferous vegetables such as cauliflower, broccoli, cabbage, kale, mustards, etc.

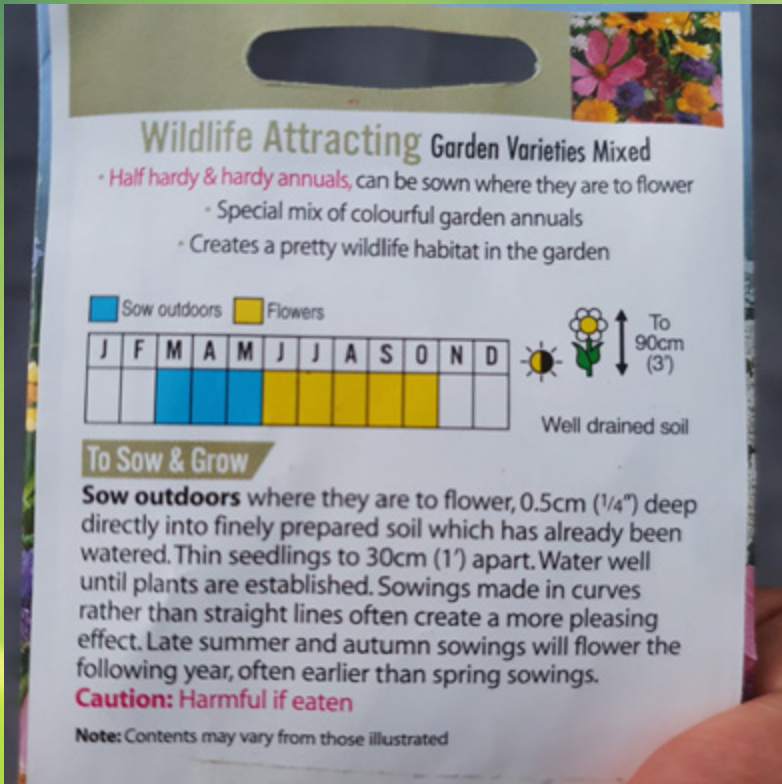


TOP TIPS: Companion Planting 😊

- Plant sweetcorn, peas and potatoes together
- Beetroot between swedes (rutabaga) and parsnips do not get attacked by birds. **Use netting anyway.**
- Grow rosemary, chives and lavender around the edges of the plot
- **Grow French marigolds and nasturtiums in EVERY PLOT**

TOP TIP: Gets Better Every Year

- Each vegetable and fruit has specific needs – **a little research goes a long way**
- **Start small, experiment**
- Takes several years to master, but gets better every year



My First Year...!



DOs & DON'Ts



Avoid Chemicals – Controlling Pests and Diseases

1. Growing healthy plants by ensuring water balance of soil
2. Adequate air and light
3. Avoid overcrowding
4. Ensuring hygiene – cutting off infested tips, sterilised secateurs
5. Keep new plants in isolation for 1-2 weeks

Crops with Some Resistance

Crop	Diseases and pests
Beans	Mosaic virus, halo blight, aphids
Blackcurrants	Mildew
Broccoli	Black rot, downy mildew, clubroot
Carrots	Rootflies
Courgettes	Cucumber mosaic virus, mildew
Lettuce	Aphids, mosaic virus
Peas	Mildew, common wilt, etc.
Peppers	Tobacco mosaic virus
Potatoes	Blight, eelworms
Tomatoes	TMV, mildew, etc.



TOP TIPS: Preventing Pests!

1. Pick off caterpillars and slugs
2. Use netting – Very useful!
3. Use carpet/cardboard squares
4. Copper tape around pots



TOP TIP: Autumn Leaves = Make Leaf Mould (Leaf Compost)

- Autumn leaves rotted down
- **How?** = Collect, pack them in binbag while moist, punch holes in bag, leave for 2 years.
- **Uses** = mulch, dig in, winter cover, potting compost
- Good quality, well-rotted leafmould (more than two years old) can be used as seed-sowing compost,
or mixed equally with sharp sand, garden compost and good quality soil for use as potting compost.

Summary: Caring for Plants

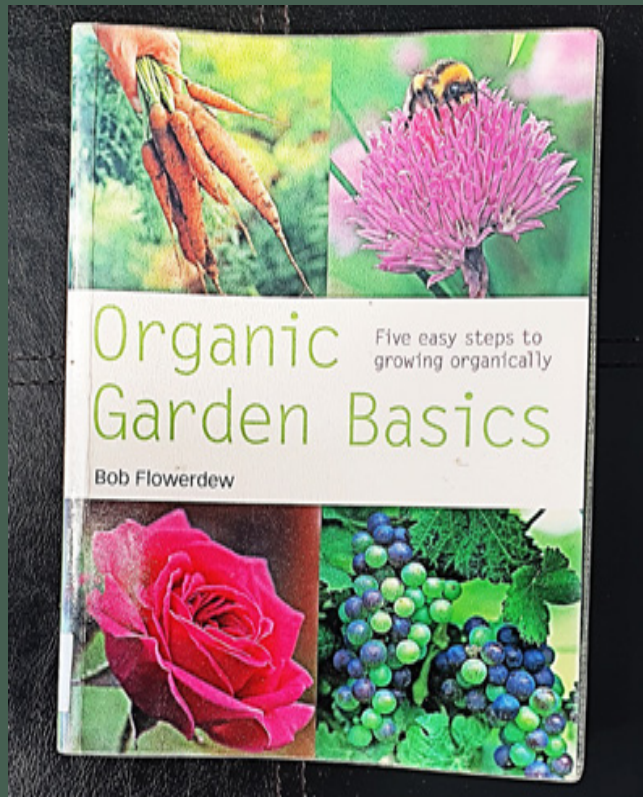
- Avoid early stress
- Keep down competition
- Rotate plants every year = **very important**
- Best to start them growing indoors, then transfer out
- Prune off diseased or pest infested tips



Watering

- Over or underwatering = most **common** cause of plants doing badly
- In times of drought, water the most valued plants with one long soak...
- Keep down weeds and mulch well
- Soak water down roots, not large areas of soil

TOP TIP: Invest in a Good Book on Organic Gardening



A year in the garden ~ Spring

	Plant	Sow	Feed	Mulch	Spray	Prune	Fruit	Routine tasks	In the greenhouse	Lawns and grass	Containers	General	
Early spring	Artichokes, asparagus, garlic, onion sets, potatoes and shallots. European shrubs and trees	Under cloches, bestroot, broad beans, cabbages, cauliflower, carrots, chards, herbs, kale, kohlrabi, leeks, lettuce, parsnips, peas, radishes, salicy, scallions, spinach, spring onions and turnips, sweet peas	Spring greens with comfrey liquid or seaweed solution	Spread everywhere	Everything with diluted seaweed solution	Evergreens and climber hedges. Hollies, stemmed and headstone. Hardy shrubs	Remove old cones of autumn-flowering clematis. Spray plants and almonds with Bordeaux mixture. Plant grass seeds, cut back and mulch.	Compost, dig in or sown green manures	Sow aubergines, cucumbers, peppers and tomatoes	Feed with liquid compost or seaweed solution		Protect early flowers and fruits against frost. Replace sticky bands if necessary	Early spring
Mid-spring	Onion seedlings and potato sets. Perennial herbs. European trees and shrubs	Under cloches: beans (Broad, French, runner), brussels sprouts, cabbages, fennel, kale, kohlrabi, leeks, lettuce and salad crops, parsnips, peas, radishes, salicy, scallions, spinach, sweet peas and turnips, herbs, sweet peas		Spread everywhere	Everything with diluted seaweed solution	Early-flowering shrubs as flowers fade. Remove tender shrub hedges as they die back		Weed regularly	Sow courgettes and marrow, gherkins, onions, pumpkins, ridge cucumbers, sweetcorn and tomatoes. Sow half-hardy flowers	Cut weekly. Use clippings for mulch	Top dress permanent plantings	Put down slug pellets. Look for signs of pests and diseases. Check sticky bands. Protect tender flowers, fruiting and panicles against frost	Mid-spring
Late spring	Courgettes and marrow, ridge cucumbers and sweetcorn	Under cloches: courgettes and marrow, gherkins, melons, pumpkins, ridge cucumbers, sweetcorn and tomatoes; half-hardy flowers. In the open: beans (Broad, French, runner), brussels sprouts (moss), cabbages, fennel, kale, leeks, lettuce and salad crops, parsnips, peas, radishes, scallions, spinach, sweet peas and turnips, herbs, sweet peas and wallflowers	Tomatoes and pet plants with comfrey liquid or seaweed solution. Incorporate compost with all transplants	Spread under and around potatoes	Everything with diluted seaweed solution	Early-flowering shrubs as flowers fade	Remove badly placed and overcropped branches on apricots and peaches	Weed regularly. Water autumn and spring plantings		Cut weekly. Use clippings for mulch		Tie in and support climbers and tall herbaceous plants. Put down slug pellets. Check sticky bands. Look for signs of pests (especially aphids, cabbage white caterpillars and red spider mite) and diseases. Protect flowers, fruiting and plants against late frosts	Late spring

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A YEAR IN THE GARDEN 133

<https://sathyasai.org/ya/stp/protect-the-planet-resources>



PROTECT THE PLANET

Service & Community Outreach Programme



Grow your own food * Conserve resources * Serve the needy * Divert food away from landfills * Prevent food waste * Recycle wasted food * Protect the environment

Take Action and Inspire

This guidance document suggests service and community outreach activities aimed at: applying environmentally friendly and sustainable gardening practices, preventing food waste, rescuing surplus food, managing unavoidable food waste for beneficial use, and protecting the environment. The underlying five-stage plan is to:

1. Undertake feasible and prudent action(s)
2. Evaluate outcomes
3. Share experience and promote environmental stewardship
4. Continue the same service action(s) into the future
5. Undertake the next service when ready

"The human being is deriving innumerable debts from Nature and enjoying the amenities provided by Nature in various ways. But what is the gratitude the human is showing to Nature? What gratitude is he or she offering to the Divine?" – Sathya Sai Baba (SSS 21.19: July 12, 1988)

Suggested Public Advocacy and Awareness Initiatives

Public Outreach	Implementation Approach
Advocacy	<ul style="list-style-type: none">• Promote environmental advocacy by:<ul style="list-style-type: none">o Starting a <u>garden</u> in the community.o Establishing a <u>composting programme</u> to help divert organic waste away from landfills. This

The Most Precious Gifts...



***Best way to succeed is to learn from
mistakes and failures***

ECOSIA

The screenshot shows the Ecosia website homepage in a browser window. The address bar at the top displays "ecosia.org". The main content area features the Ecosia logo, which consists of the word "ECOSIA" in a stylized font with a globe icon in the center of the "O". Below the logo is a search bar with the placeholder text "Search the web to plant trees...". Underneath the search bar, the number "91,307,882" is displayed in a large, teal font, with the text "Trees planted by Ecosia users" below it. A teal circular button with a white downward arrow is positioned below the text. The background of the page is a colorful illustration of a savanna landscape with various trees, a river, and people. In the top right corner, there are navigation icons for a tree count (0), a notification bell, and a menu. A pop-up notification box is overlaid on the right side of the page, containing the text "Let's plant some trees!", "Make Ecosia your new search engine and plant trees with your searches - for free!", and a blue button labeled "Add Ecosia to Chrome".

'Grow Your Own' Challenge!

- Start growing your favourite foods from seed
- Chant Gayatri Mantra to it every day
- Record your experience with photos or videos, and send it to (servetheplanet@sathyasai.org) with the subject '**Grow Your Own**'



Extras



Encouraging Wildlife

- Why?
- Do not over-tidy the garden...
- Presence of water
- Provide winter-homes for pollinators
- An 18 by 24 inch wooden box for hedgehogs
- Grow flowers that attract ladybirds (fennel) and distract aphids (foxgloves), etc.

What do we do with weeds?



Weeds can be Beneficial!

- Builds up fertility of soil for tree seedlings
- Deep rooted ones (thistle) bring up nutrients
- Many are valuable plants – poppies



Weeds can be Beneficial

- Fixes and stabilises soil
- Helps preserve insect and wildlife populations (bees and butterflies) – hence leave some throughout the year.
- Many are edible – dandelion leaves, roots, etc.

Weeds also Need Controlling...



1. Dig up - breaks new ground (compost after wilting)
2. Hoe them – maintain control
3. Mulch over – prevents germination
4. Handweeding + sharp knife

Weeds can be Composted 😊





Mulching

- Most important method of weed control
- Conserves moisture and maintains temp
- Most beneficial when applied in early spring
- Old carpet, or newspapers/cardboard covered with grass clippings



First Timers – Break New Ground!

Lay down
thick,
impenetrable
mulch – early
spring



After 1 month,
roll back in the
morning to
allow slugs to
go underground



Late spring –
plant
seedling
through holes
in the mulch



Autumn –
remove
mulch after
last harvest



Overwinter
the plot
under a
green
manure

Know your Weeds...

Perennials

- Persist and regenerate every year
- Deep rooted
- Best to pull out or dig out and mulch with thick layer
- Remove all before planting veggies or fruits

Annuals

- Live and die within a year, leaving seeds
- Prevent germination by mulching
- Best to use as green manure or winter groundcover
- In early spring, can be mulched, dug in or hoed in to increase fertility
- Can be composted after withering
- Can be made into liquid feed

Encouraging Beneficial Birds

- Blue tits, tree sparrows, robins, etc.
- Little wooden boxes with a hole in the front (different sizes)
- Provide water
- Give 'aflatoxin-free' peanuts, wild bird seed, kitchen scraps, etc.
- Away from possible surprise attacks from cats
- Shrubs and small trees like holly, bear berries = major part of diet



Further Resources and Contact

Resources, such as study circle guide, service and outreach guide, “Mini-Booklet on Practical Tips”, are available at Serve the Planet page:

sathyasai.org/ya/stp/protect-the-planet-resources

Further resources are also available at Environmental Sustainability page:

sathyasai.org/environmental-sustainability

For questions or feedback, please write to us: servetheplanet@sathyasai.org

