

Eanáir / Feabhra – Gairdín phlandai tí na scoile



Paddy Madden continues his series of SESE tips

January/February

Hands-on: the school indoor garden

What is it?

An indoor garden can be composed of: (a) health-giving plants; (b) desert plants; (c) seedlings; (d) humidity-loving plants; (e) citrus plants; (f) indoor bulbs.

Background information

Houseplants have been popular since the 17th century. Back then big houses grew oranges and lemons indoors. In Victorian times a craze developed for bottle gardens and ferns.

Did you know?

1. All houseplants absorb toxins from the air. These toxins such as formaldehyde are emitted from manufactured and synthetic materials in the average room. These gases can cause headaches, eye, throat and nose irritation and fatigue.
2. If the humidity in a room is too high or low it can make occupants more prone to illnesses such as colds and flu. Indoor plants help to produce the ideal room-humidity through their transpiration and evaporation processes.

General care of houseplants

- ✦ Regularly check for watering requirements. Stick finger 2.5cm into soil. If it seems dry give plant a good drink of tepid rain water. If soil feels moist don't water. Water sparingly in winter and don't feed.
- ✦ These tropical plants need plenty of humidity. Place the pots on trays filled with a 2.5 cm layer of grit, gravel or small pebbles. Keep this moist (do not let water cover the pebbles). As it dries out it will add humidity to the plant. Mist the foliage regularly with a fine spray of tepid water. In winter only do this in the morning.
- ✦ Sponge leaves regularly with tepid water to remove dust which clogs up the leaves.
- ✦ Feed every two weeks from spring to autumn with a suitable indoor plant fertiliser.
- ✦ Pests and diseases: Remove dead leaves regularly. Spray mealybugs, whiteflies, spider mites and aphids with soapy water or a garlic spray. Make the latter by mashing a garlic bulb and leaving it overnight in water. Next day strain and fill a spray gun. Remove pests with cotton buds also.

Health-giving plants

Five easy to maintain plants which absorb toxins from the air. NASA recommends 1 plant per 10m² of room space.

- Spider Plant** (*Chlorophytum*) Repot once a year in spring. Avoid too much sun. North-facing window ideal. Snip off offshoots and place in water to root.
- Boston Fern** (*Nephrolepis exaltata*) Likes indirect light. Soak roots in water for a few hours if it becomes too dry. Likes lots of humidity. Spray once a day. Keep plant in tray of pebbles half-filled with water.
- Peace Lily** (*Spathiphyllum*) Likes indirect sunlight. Spray with fine mist twice a week. Keep in tray of pebbles like Boston Fern. Repot annually in spring.
- Mother in law's tongue** (*Sansevieria trifasciata*) Sometimes called 'Snake Plant'. Grows in any situation. Water when compost dries out. Water sparingly in winter. Feed once a month spring to autumn.
- Aloe Vera** (*Aloe barbadensis*) Easy to grow. Full light. In winter water once or twice a month. Feed once a month from spring to autumn.



Spider plant



Boston Fern



Mother in Law's Tongue

Bottle garden



Good resource for teaching and learning about the rainforest. See www.blackrockec.ie/content/paddys-school-garden



Lithops – 'living stones'.

Desert garden



This can be a stimulus for lessons on deserts. You will need: a shallow tray such a seed-tray or cat litter tray (make drainage holes in the bottom with nail scissors); three or four cacti such as *Cleistocactus strausii*, *Trichocereus candicans*, *Mammalaria bocasana*, *Gymnocalycium mihanovichii* Hibotan, *Cereus peruviana*, *Rebutia* and *Chamaecereus*; strong gloves and newspaper; watering can with rainwater; grit, sand and pebbles; rosette succulent such as *Sempervivum* for variety and *Lithops*; miniature camel.

- ✦ Place a thin layer of grit over the bottom of the tray.
- ✦ Add c.2.5cm of cactus compost. Make holes for plants.
- ✦ Use gloves and newspaper to transfer plants. Plant upright ones like *Cleistocactus* and *Cereus* at the back;

- globular ones like *Rebutia* and rosette shaped ones such as *Chamaecereus* or *Sempervivum* at the front.
- ✦ Surround plants with golden sand, pebbles and camels. Keep in sunny place. Water with tepid water.
- ✦ Aftercare: Let compost dry out between watering; increase watering in April. From May to August water well with tepid water when compost dries out. Less water in September. From October to March need little or no water; if in pots re-pot annually when young. After that only re-pot when they grow near the rim.
- ✦ Amazing! *Lithops* or *Living Stones* avoid being eaten by camels because they resemble stones.

Literacy/Litearthacht

✦ **Health-giving plants/Plandaí a chothaíonn dea-shláinte:** These are indoor plants which absorb toxins from the air. *Plandaí a shúnn isteach tocsain ón aer.*

✦ **Bottle-garden/Buidéal-ghairdín:** Made up of plants which like shade, warmth and humidity. *Déanta de phlandaí a dtaitníonn scáil, teas agus bogthaise leo.*

✦ **Desert garden/Gairdín gaineamhlaigh:** Made up of plants which like warm, arid conditions such as cacti. *Déanta de phlandaí ar nós cachtas a dtaitníonn cúinsí teolaí tura leo.*

✦ **Citrus garden/Gairdín citris:** Made up of orange and lemon plants. *Déanta de phlandaí oráiste agus plandaí líomóide.*

Buíochas do Marie Whelton (MIE) don aistriúchán.

Bulb garden

See www.blackrockec.ie/content/paddys-school-garden



Resources

Websites mentioned plus:

- ✦ *Kids Garden*, by Avery Hart and Paul Mantell (Williamson Publishing Company)
- ✦ *The House Plant Expert*, by Dr D.G. Hessayon (pbi Publications 1980)
- ✦ *37 Houseplants Even You Can't Kill*, by Mary Kate Hogan (Sterling Publishing Company 2006)
- ✦ *Indoor Gardening*, by J Griffin-King (Ladybird 1969)
- ✦ *Amateur Gardening Magazine*, September 2012, March and October 2013.

Citrus garden

Soak pips for two days. Place in moist potting compost in Ziploc bags. Seal and leave in warm, dark place such as hot press. Should begin to shoot in three weeks. Bring into the light. Keep in bags until third leaf appears. Plant in pots and keep in warm room with plenty of light.



Mini greenhouse

Cut large openings on the top and sides of a cardboard box. Tape with cling-film. Use for bringing on seedlings. Link with science: Compare temperatures outside and inside the greenhouse.



PADDY MADDEN lectures on SESE in the Marino Institute of Education. He also gives short courses to whole staffs on school gardening. His book **Go Wild At School**, has recently been reprinted. Available from paddy.madden@mie.ie for €18 (Includes p&p).