

## Working In Tandem With The Seasons

Paddy Madden continues with the series on SESE tips for throughout the year

## April

## INDOOR

**1 Make a wormery in the classroom:**

It's important that children appreciate the usefulness of earthworms. They recycle decaying matter such as rotting leaves and turn them into soil. They also make tunnels in the soil which allow air, water and nutrients to get to the roots of plants. They are links in many food chains and so contribute to biodiversity. All you need to set one up is a clear 5l water bottle, some sand, crushed chalk and soil, a 500 ml water bottle, decaying leaves, 3 or 4 earthworms and a shoe box. See [www.black-rockec.ie](http://www.black-rockec.ie) for detailed instructions.

**2 Continue keeping records:** See

[www.birdwatchireland.ie](http://www.birdwatchireland.ie), [www.ispynature.com](http://www.ispynature.com), [www.phenology.biodiversityireland.ie](http://www.phenology.biodiversityireland.ie), [www.green-wave.ie](http://www.green-wave.ie).

**3 Observe tadpoles in an ecology**

**tank:** Children are always fascinated with the life cycle of frogs. All teachers have a licence to collect some spawn from a pond and bring it into the classroom for observation. Use a very small amount of frogspawn – aim to have c.1 tadpole per litre of water. The tadpoles are herbivores until they grow legs so it's essential that they have pondweed and algae to eat until this stage of development. They will also eat tiny pieces of lettuce. Freeze or boil it first to make it more palatable. Clean the tank once a week using a length of tubing about a metre long to suck most of the water from the tank. Always replace the water with rainwater making sure that it is the same temperature as the water in the tank before pouring it

in. When the tadpoles acquire legs feed them on goldfish food.

**4 Start a 6 week project entitled, 'Adopt a Tree':** Children should be encouraged to study trees in the school grounds or near their home. They could compile a folder with the results of their observations. A suggested programme of work is as follows:

**Week 1:** Study buds, bark, branches.

Draw an outline of the tree. Use masking tape to cover the branches and roots they have drawn. Paint over the picture using bright colours for what is visible above ground and dark colours for what they imagine is under the ground. Remove the tape when the picture is dry. Do bark rubbings.

**Week 2:** Get the tree's vital statistics: age, height, area of canopy.

**Week 3:** Get background information on the tree: native or non-native; uses; folklore; poetry associated with tree.

**Week 4:** Examine the leaves. Do leaf rubbings. Set up a fair test to explore transpiration. Press leaves.

**Week 5:** Find out what invertebrates inhabit the tree and its environs by setting up pitfall traps, branch traps and bark traps.

**Week 6:** Research uses, flowers and fruit. Put finishing touches to project.

See [www.adoptatreeproject.com](http://www.adoptatreeproject.com). Also [www.irishtimes.com/times-eye/trees/pdf/classroom.pdf](http://www.irishtimes.com/times-eye/trees/pdf/classroom.pdf)



Chestnut bud



Wormery



Tree project



## OUTDOOR

**1 Sow peas, carrots, sunflowers and salad crops:** The peas, carrots and sunflowers which were grown indoors in March can now be sown outdoors in raised beds.

**2 Keep an eye on the growing potatoes:** When the potatoes are c.7cm high cover the stalks with mounds of soil leaving the tips showing. This is called 'earthing up'. The process ensures higher yields and also prevents tubers from going green. It also protects them from frost. Start feeding them with a fertilizer high in potash at this stage. By June each stalk should be surrounded by a mound of earth c. 15cm high. Follow the weather forecast. If frost is promised protect the tubers with horticultural fleece or newspapers.

**3 Sow mangetout peas in a runner bean bag:** These bags are 60cm in

diameter and 40cm deep. The planting mixture should be high in organic matter. Make a wigwam by placing 4 x 1.8m bamboo canes in the bag the same distance apart. Tie them at the top with a string. Tie strings 10cm apart and parallel with each other all the way to the top. The peas will climb up these strings.

**4 Sow hardy annuals if they weren't sown in September:** Children are very attracted to these colourful flowers. Marigolds, Californian Poppies etc. are easy to grow. Follow the instructions on the packets.

**5 Observe the flower layer of a wood:** During April the flowers in this layer such as primroses and bluebells start to bloom. They do this in order to take advantage of the light and pollinating insects before the leaves appear to cause shade.



Peas in gutter pipe



mangetout peas in grow bag



Colourful annuals



Primroses



Daffodils



**PADDY MADDEN** lectures in SESE in Coláiste Mhuire, Marino Institute of Education. The monthly articles, 'Working in tandem with the seasons', are based on the very successful course of the same name which was pioneered in Marino in 2009. This year the course will take place in the Blackrock Education Centre on one Monday every month from September to June. Enquiries to [Catherine@blackrockec.ie](mailto:Catherine@blackrockec.ie). The Centre will also produce 5 short videos every month based on the monthly sessions. They can be downloaded from [www.blackrockec.ie](http://www.blackrockec.ie). Click on Paddy's School Garden.

**Strand Units covered this month:** Strand units covered this month: Environmental awareness, caring for the environment, plant and animal life, rocks and soil.

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