Eanair/Feabhra – Focas ar Ohlainn Peady Madden continues his series of SESE tips

anuary Fe zoom in on trees

A way forward from Januar

January is here. It's time to begin a study of trees in the school grounds or locality. Children should identify trees from observing their outlines and buds. Sometimes results are surprising when they are asked to sketch the tree or leaf with their eyes closed! Now is a good time too to examine the buds, bark and the branches

Literacy/Litearthacht

Heartwood (croí-adhmad) – The trunk part that is made up of dead cells. It gives the tree strength. *Cuid de* thamhan crainn atá déanta as cealla marbha. Tugann sé láidreacht don chrann.

Sapwood (sú-adhmad) – The part of the trunk consisting of very fine tubes that carry water and nutrients to leaves. Cuid de thamhan crainn ina bhfuil mín-fheadáin a iompraíonn uisce agus cothaithigh chuig na duilleoga. Xylem (xiléim) – Water is carried up from the roots by tubes known as 'xylem'. Iompraitear uisce ó na fréamhacha trí fheadáin a dtugtar 'xiléim' orthu. Phloem (fléam) – Fine tubes that carry sugars made by the leaves to other parts of the tree. Mín-fheadáin a iom-

parionn siúcraí a dhéantar sna duilleoga agus i gcodanna eile den chrann. **Bark (coirt)** – The tough outer skin that protects the tree. An craiceann righin seachtrach a thugann cosaint don chrann.

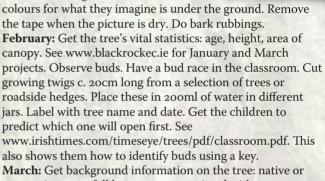
Transpiration (trasghalú) –

Process whereby water is carried from the roots to the leaves where it evaporates into the atmosphere. *Próiseas trína n-iompraítear uisce ó na fréamhacha chuig na duilleoga áit a ngalaíonn sé isteach san atmaisféar*.

Photosynthesis (fótaisintéis) – Process in which a plant makes the carbohydrates from carbon dioxide and water, using sunlight as the source of energy and with the aid of chlorophyll. Próiseas ina ndéanann planda carbaihiodráití ó dhé-ocsaíd charbóin agus ó uisce ag baint úsáide as solas gréine mar fhoinse fuinnimh agus le cabhair ó chlóraifill.

Adopt a tree – a programme of work

January: Study buds, bark, branches. Draw tree's outline. 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



March: Get background information on the tree: native or non-native; uses; folklore; poetry associated with tree. April: Examine the leaves. Do leaf rubbings. May: Find out what invertebrates inhabit the tree and its environs by setting up pitfall traps, branch traps and bark traps. Do art work on leaves, twigs, bark. See www.blackrockec.ie – projects for May. June: Set up a fair test to explore transpiration. (See

www.blackrockec.ie Projects for June. Press leaves. Do science experiments. Research uses, flowers and fruit. Put finishing touches to project. See www.adoptatreeproject.com.

Useful websites and resources

- www.treecouncilofireland.ie worksheets for every class www.crann.ie – Schools' Project Crann Magazine.
- www.blackrockec.ie videos on how to plant a mini-wood, how to plant a hedgerow, how to get the height and area of the canopy of a tree, how to make a log-pile, how to propagate trees from seeds and cuttings.
- www.trails.ie award-winning site on how to create tree trails on the school grounds.
- www.enfo.ie general information. www.naturedetectives.org.uk – leaf
- dials, leaf bing etc. Go Wild at School by Paddy Madden (School Wildlife Gardening

Association, 2011). Chapters on how to plant a mini-wood on school grounds and how to plant a native hedgerow.

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- Trees of Ireland by E Charles Nelson and Wendy F Walsh (Liliput Press, 1993)
- Native Trees and Forests of Ireland by David Hickie (Gill & Macmillan, 2002)
- Irish Trees Myths, Legends and Folklore by Niall MacCoitir (The Collins Press, 2003).
- Trees in our World A Global Education Pack (EcoUnesco)
- Tree-mendous Trees Activity Book (EcoUnesco)
- *Narture* by Gordon D'Arcy. See www.gordondarcy.ie.

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Teaching Matters

