

Gladstone Regional Seed Library

What is it?

A seed library collection is where the library loans out seeds instead of books or DVDs.

How does it work?

Gladstone Regional Library members borrow seeds for free then plant and tend to their crops. The return on this long-term loan is not fresh produce but instead the return of some seeds from the yield. These seeds are then made available for members to plant next season

Seed Donations:

The library is happy to accept donated seeds. When giving a donation you will be required to fill in a seed donation form with as much details about the plant as possible. Gladstone Regional Council are not accountable for the content of seed donations and any errors in the information provided with them.

Information Handouts:

This range of information sheets and activities have been designed to provide basic information on the seeds available and help teachers and parents encourage and inspire their children's interest in nature.

Curriculum Ideas:

Science: Scientific classification system, monitoring temperature of farm

Numeracy: Measuring length of worms, and weight/amount of food

Literacy: Worm farm diary (feeding, tasks, observations)

Art: Silk worms and use of silk

History/geography: Distribution maps for different species, history of computer worms/viruses, Worms in Germany (place)

Further Reading and References

The following resources contain more information about the topic:

1. Abc.net.au, (2014). *Gardening Australia - Worm Farming - The Basics*. [online] Available at: <http://www.abc.net.au/gardening/stories/s3683115.htm> [Accessed 8 Jul. 2014].
2. Compost.css.cornell.edu, (2014). *Worm Composting Basics - Cornell Composting*. [online] Available at: <http://compost.css.cornell.edu/worms/basics.html> [Accessed 8 Jul. 2014].
3. Your Energy Savings, (2014). *Start a worm farm*. [online] Available at: <http://yourenergysavings.gov.au/waste/reducing-recycling/kitchen-food-waste/start-worm-farm> [Accessed 8 Jul. 2014].
4. Garden Note: Worm farms. (2010). 1st ed. [ebook] Department of Agriculture and Food. Available at: http://archive.agric.wa.gov.au/objtwr/imported_assets/content/pw/gard/wormfarm.pdf [Accessed 8 Jul. 2014].

Seeds are freely available at all the Gladstone Regional Library branches:

- Agnes Water Library
- Boyne Tannum Community Centre
- Calliope Library
- Gladstone City Library
- Miriam Vale Library
- Mount Larcom Library
- Philips Street Family Precinct

For more information visit:

www.gladstonelibraries.qld.gov.au

Gladstone Regional Libraries

Seed Library DIY Collection

Worm Farming



Image: Earthworm (*Lumbricus terrestris*)

Source: www.soil-net.com



Worms

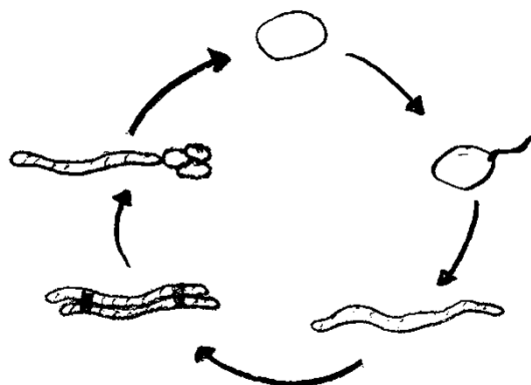
Scientific Profile

Kingdom:	Animalia
Subkingdom:	Tracheobionta
Superdivision:	Spermatophyta
Phylum:	Annelida
Class:	Oligochaeta
Subclass:	Haplotaxida
Order:	Megadrilacea
Suborder:	Lumbricina + Moniligastrida
Genus:	Lumbricus
Species:	rubellus
Scientific Name:	<i>Lumbricus rubellus</i>
Common Name:	Common Earthworm

Worm farms are a great way to use worms to recycle food scraps and other organic materials into worm compost. This compost can then be used as a rich fertilizer for growing plants.

Lifecycle of an Earthworm

Cocoon (3 weeks) → Hatchling →
Adult Worm (3 months) → Mating → Lays Cocoon
(1/week)



How to build a worm farm

Equipment:

- Polystyrene or plastic boxes; or a purpose-built farm (minimum 15cm deep)
- Shredded newspaper
- Food Scraps
- Soil
- Worms

Setting up:

1. Line the base of box with moist newspaper
2. Mix moist (not wet) soil and food scraps together and add to the box
3. Gently spread worms over the surface, allowing them to burrow in by themselves
4. Cover with a loose fitting lid to allow air in
5. Keep worm farm damp, covered and cool

Feeding Your Worms

1. The basic diet of worms is made up of food scraps including vegetable and fruit peelings, tea leaves, crushed eggshells and bread
2. The smaller you chop the food pieces, the easier the worms will be able to digest it
3. Add small amounts of food in one place at a time, covering it lightly with some soil
4. Only feed your worms when they have almost finished their last meal or it will start to rot
5. **Don't** feed worms on dairy (butter and cheese), meat, fish, fat or bones. They also don't like citrus peel, onion or garlic
6. **Don't** mix manure from an animal that has been drenched for parasitic worms
7. **Don't** use too much lawn clippings as this can "sour" the mix
8. **Do** use small amounts of shredded newspaper or egg cartons

Using "Worm Tea" and Worm Compost

Worm Tea

- If your worm farm captures worm liquid, empty the tray regularly using the tap
- Dilute this worm liquid to the colour of weak tea and then it can be watered onto your plants

Worm Compost

- Move the worms' bedding to one side of the farm, add fresh bedding to the empty side
- Feed worms on the "new side" to encourage worms to migrate
- After several days most of the worms will migrate over to the fresh bedding.
- Remove the old bedding and use it on your garden (you'll also be transferring worm eggs which will hatch in your garden and improve your soil)