

Guidelines



Propagating from seed

G-7.1

Propagation from seed enables land managers to ensure stock for planting comes from local species and that genetic populations are maintained. Propagation from seed involves collecting seed, drying and cleaning seed; and planting the seed. A permit may be required for collection.

Use these guidelines in conjunction with the information provided in Chapter 7 when planning works and engaging consultants and contractors to ensure the proposed works use the most effective methods and minimise the risk of causing damage to coastal values.

Collecting seed

A permit may be required for seed collection, contact the Biodiversity Conservation Branch of DPIW.

Seed from most species is ready to collect in summer. The time when seed is ready can vary from year to year, depending on the weather, so start looking in December.

Take safety precautions and avoid unnecessary risks such as climbing trees without a safety helmet. Wear a dust mask or respirator if you suffer from allergies or asthma when collecting seed from daisies and other plants with dusty seed.

Avoid collecting in wet weather, as the seeds may go mouldy.

Collect seed on or as close to the site as possible, so it is genetically similar to the plants on the site to be planted. Collect from as many different plants as possible to get a diverse range of genetic material from the site.

Check that ripe seed is present by opening a few seedpods. Ripe seed is dark in colour.

Take no more than 10% of the seeds from any one plant. Follow the FloraBank Model code of practice.

Drying and cleaning seed

Seed capsules may require drying or heat treatment to release the seed. Some seed requires cleaning (to remove other material such as twigs) before it is stored. Refer to the Understorey Network plant database and Florabank guidelines for details.

Leave the seed capsules in a warm dry place or on top of a warm stove to release seed.

Once the seed is released, use sieves to separate the seed from other material. It is not necessary to clean the seed completely (and with fine seed, too much seed can be lost).

When cleaning seed wear gloves and a dust mask, and work in a well-ventilated area. Some plants are toxic and others may cause allergic reactions.

Store the seed in labelled containers in a cool dry place.

Planting the seed

Pre-treating the seed may be necessary to overcome dormancy or break a hard seed coat.

Use a sterile well-drained seed-raising mix (e.g. one part each of river sand, cocopeat and perlite). There is no need to add nutrients.

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Place the seed-raising mix in clean trays, punnets or Kwik Pot cells. Shake the soil down very gently to make an even flat surface about 10mm below the top of the tray. Do not push the soil down firmly or jolt the container, because this removes oxygen from the soil.

Alternatively, plant 2-3 seeds straight into tubes or similar containers to avoid the need for pricking out (replanting young seedlings into new containers). This produces very hardy plants, as seedlings are not disturbed until they are ready for planting

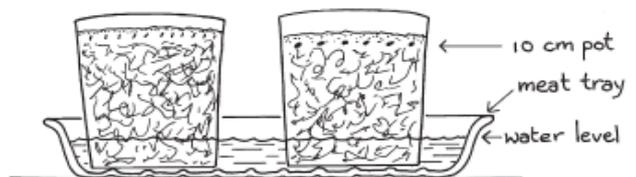
Spread the seed evenly over the surface of the potting mix, and then cover with a shallow layer of seed-raising mix. Do not firm down.

Water from the bottom up, known as bottom-watering, where practicable.

Grow seedlings outdoors in a warm, protected but well-ventilated place, sheltered from prevailing winds, in about 50–70% shade. If nights are cool, place trays in a warmer room. Growing indoors or in a shadehouse is only necessary in frost-prone areas.

Prick out seedlings when the second pair of true leaves appear, and plant in forest tubes, grow tubes or 80-100mm pots. Keep them in about 60–70% shade for one week to several weeks (depending on the species' hardiness, refer to The Understorey Network plant database) before gradually exposing to stronger sunlight.

Keep tubes or pots on racks so that any roots that grow out of the container die off (air-pruning).



Bottom-watering. © Janet Fenton

More Information

FloraBank model
www.florabank.org.au

Tasmanian coastal works manual: Chapter 7, Page & Thorp 2010

The Understorey Network guide to growing native plants in Tasmania, Thorp 2001

Understorey Network Plant Database. The seed timelines indicate the best months to collect seed for each species.

www.understorey-network.org.au