

## Managing delays in production and planting of native seedlings due to COVID-19 lockdowns



**With the nationwide COVID-19 lockdown in early 2020 and lockdowns since, there was concern the planting of native trees and shrubs would be delayed.**

During the March-April 2020 lockdown, millions of seedlings were in native plant nurseries ready for planting in the planting season that year.

Te Uru Rākau – New Zealand Forest Service commissioned Tāne's Tree Trust to analyse the effects of lockdowns on the production of seedlings in native plant nurseries and on sites to be planted that year.

### Methods

For this project we reviewed existing information sources and interviewed people in the native plant nursery and planting sectors.

We used online surveys to get the views of native plant nurseries and people planting natives.

To make analysis and reporting on survey

results easier, most questions used tick boxes. People could select their answer from a list or choose a rating or percentage value. Surveys were emailed out in late February 2021.

### Results

Feedback from each of the surveys is summarised below.

#### Nursery survey

The COVID-19 lockdown in autumn 2020 happened at the peak time for seed collection. This is an important phase of nursery operations, essential for raising stock for the next year. Growing natives (or exotics) has a strict sequence of activities that must happen through the year to be successful.

Nurseries see themselves as an essential service. They work with living products,

similar to animal and food industries.

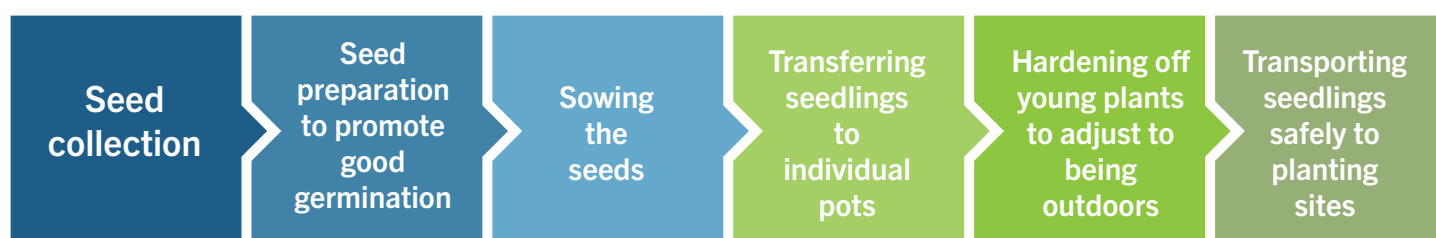
Nursery products need ongoing management during lockdowns and other disruptions.

Native plant nurseries think more flexibility is needed for their operations during future lockdowns. They follow a rigid seasonal pattern as shown below.

Like farms and other rural enterprises, nurseries are mostly outdoors. This allows safe work bubbles to be set up for all operations.

Options to manage disruptions to nursery propagation include the following.

- Topping (trimming the top of a plant to stop vertical growth) to hold stock over for a few months. This is only practical for selected species like shrub hardwood species.



- Repotting into larger containers to hold stock until the next planting season. This avoids bound and distorted root systems, but requires more labour and extra nursery facilities.
- Collecting and storing more seed to provide flexibility. This risks seeds becoming less able to germinate over time.

### Planter survey

The effect of a disruption at the planting site depends on the time of year, length and how severe the restrictions are. The COVID-19 lockdown in autumn interrupted site preparation just ahead of the main planting season. As a result, planting was later than normal. Planting delays put plants at risk of dying during the dry summer months.

Planters suggest more flexibility to allow planting of natives to continue under a COVID-19 type lockdown. It's an outdoor activity, allowing social distancing and work bubbles.

Options for coping with delays in planting and extending the planting season include:

- planting larger stock, which may be more resilient to delayed planting. This takes up more space for transporting. It is also heavier for handling at planting sites.

- using plant protectors to reduce exposure, and/or mulching to maintain soil moisture. Both are expensive and a lot of work.
- selecting hardier species to plant
- avoiding problem planting sites.

Practical options for coping with a delay at the planting site include:

- herbicide spraying of problem woody weeds that can take over during delays at planting sites
- maintaining grazing of pasture sites, but this requires fencing
- grassing bare sites to stop exotic woody weeds growing – this would cost extra.

### Conclusion

COVID-19 had a small to moderate effect on nurseries operationally and financially. COVID-19 had less impact on planters. Any long and restricted lockdowns in the future would be a major disruption to native plant nurseries and those preparing and planting sites.



### Acknowledgements

This fact sheet was produced by Tāne's Tree Trust with input from Scion, Manaaki Whenua, native plant nursery and planter practitioners, and Māori representatives. It is based on the technical report **Managing delays in production and planting of native seedlings due to COVID-19 lockdowns**, commissioned by One Billion Trees, Te Uru Rākau – New Zealand Forest Service.

Tāne's Tree Trust: [office@tanestrees.org.nz](mailto:office@tanestrees.org.nz)

Dr David Bergin, Trustee and Scientist, Tāne's Tree Trust  
[davidbergin.eri@gmail.com](mailto:davidbergin.eri@gmail.com)

### Want more information?

Read the MPI technical report – **Managing delays in production and planting of native seedlings due to COVID-19 lockdowns**

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