Above Ground Worm Farms

TUMBLEWEED®

Your ultimate guide to Worm Farming

- Getting started
- Feeding your worms
- Maintaining your worm farm
- Harvesting
- Troubleshooting

Keep in touch!

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www.tumbleweed.com.au

Thankyou!

Thank you for joining the sustainable revolution. Worms are nature's unique natural recyclers. By putting worms to work in your very own easy-care worm farm, you will be converting your food waste into nutrient rich organic fertiliser that your potted plants, garden and vegetables will love. Not only do worm farms produce free fertiliser, but they also prevent waste from going into landfill, which in turn helps save our planet and makes your garden thrive.

This booklet is a comprehensive guide on worm farming, including how to successfully set up and maintain your new worm farm. Every Tumbleweed worm farm has a positive impact, so thankyou for supporting:

100% Recycled Plastic
Giving waste materials a new, long term second life

Waste Reduction
Diverting organic waste from landfill

Australian Made
Supporting local manufacturing

A note from Tumbleweed®

Tumbleweed® is an Australian family-owned business that designs and manufactures products from 100% post-consumer recycled plastic. For over 40 years, we have strived to make a significant contribution to our earth's environmental sustainability by making innovative products that encourage consumers of all ages to reduce, re-use and recycle organic waste at home.

Almost half of all household waste is organic and compostable. Tumbleweed® composting and worm farming products enable people to divert this waste from landfill by recycling at home. The carbon-rich humus that makes up the worm castings and liquid will add valuable soil conditioner to your soil to increase its water and nutrient holding capacity, making your plants grow faster and healthier. This fertiliser also contains beneficial microbes that stimulate strong, healthy plant growth. A great benefit for your plants and for the environment!

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Why recycle?

Food waste in landfill becomes compacted and anaerobic to produce methane and landfill leachate, resulting in air and water pollution. Diverting organic waste by composting at home reduces your households carbon footprint and is a sustainable waste solution. **Almost half** of all household waste produced is organic and can be composted at home!

Worms, worms, worms.

Worms are amazing creatures

These living fertiliser tubes are full of countless numbers of beneficial bacteria and enzymes. As worms break down organic matter, they aerate, recarbonate and rehydrate soils, playing a vital role in sustaining the life and fertility of all our horticultural and agricultural systems.

What worms do I need?

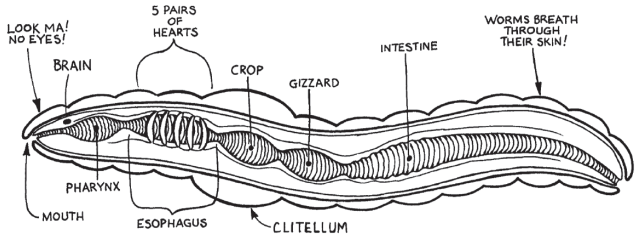
The species of earth worm you need to start your worm farm are **composting worms**:

- Red Wrigglers
- Tiger Worms, orw
- African Night Crawlers

To ensure your worms are healthy, purchase from a reliable source such as the Tumbleweed website, a local worm farmer or a reputable garden center.

Composting worms live high up in the composting layer of the soil where they decompose organic matter and turn it into rich plant food and a nutritious liquid for your garden. This makes them perfect for a worm farm.

The anatomy of a worm



Fun Fact

Every worm breathes air through holes in their skin.

This makes it important to keep your worm farm aerated.

How does a worm farm work?

Worms and microbes take organic matter in through their mouth and grind waste up in their gizzards.

As the worm digest organic waste, they create smaller and smaller particles.

They produce worm castings and worm liquid, both containing many useful nutrients for healthy soil.

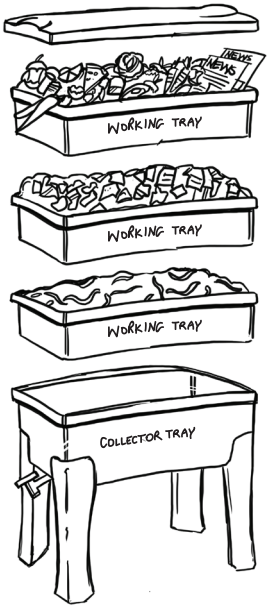
Worm farm trays

Above Ground worm farms work in a rotational tray system. Worms travel between the trays, moving up to the surface to feed, and down to deposit castings and liquid. Mature castings are always harvested from the lowest Working Tray. Once emptied, this tray is cycled to the top and becomes your new feeding tray and the whole process starts again!

Working Tray/s

The top **Working Tray** is where you feed your worms. When starting a worm farm, you will only have one **Working Tray** to begin with**.** As worms break down your food waste they will begin to fill the tray. You are ready to add a new tray when this becomes filled to about 5cm from the top.

The middle **Working Tray/s** are where your worms will continue to process organic waste into smaller and smaller particles, called worm castings. Once the material in these trays becomes very fine and mud-like with no visible food scraps, they are ready to harvest to use in your garden. Always harvest the lowest tray, as this contains the most mature castings. The newly emptied tray is now cycled to the top to become the new top **Working Tray** where you feed your worms.



Collector Tray

The **Collector Tray** is where rich worm liquid is collected, to be used as a fertiliser for your garden. Dilute it with water until it is the colour of weak tea before pouring over your plants.

Start small

Let your worms settle in

Your worms need time to get used to their new environment, and increase their population - so for the first six weeks, feed them in small amounts. Start with feeding a handful of chopped food scraps every second day. Once your worm farm becomes more established and the population increases, your worms can process more food. Gradually increase the volume you are feeding your worms, only adding more food once most of the existing food has been eaten.

Fun Fact

Worms don't have teeth!
They eat the bacteria on the surface of rotting food and process it through their gizzards.

Add grit to your worm farm to help worms grind their food. Crushed egg shells and soil are both good sources of grit.

Feeding your worms

Successful worm farming is all about balance

Worms love a balanced diet, so it is best to feed your worms a mix of 70% greens (nitrogen) and 30% browns (carbon rich materials). As a guide, worms will eat anything that was once living - remember, variety is the spice of life!

Lift the lid and add a thin layer of food scraps to the surface of the top Working Tray. Every time you feed your worm farm, mix to incorporate new food with old food. This will increase the efficiency of the worm farm by making the food more accessible to the worms.

The finer you chop your food scraps, the quicker they will be converted into castings by microbes and worms. Things such as avocado seeds need to be broken up (a blender does a good job of this) so the worms can get their mouths around it.

Every time you feed your worms, sprinkle a handful of organic soil (from your garden is fine), crushed egg shells or vacuum cleaner dust. The grit from these materials help the worms' grind the food up in their gizzards.

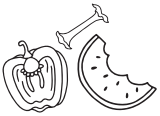
TIP

Use a Worm Blanket.
After feeding your worms, add a dampened worm blanket to the surface before securing the lid. Worm Blankets keep the worm farm dark to encourage worms to come to the surface to feed, making your worm farm more efficient!

What can I feed my worms?

Greens (Nitrogen)

Attracts microbes that assist in the decomposition process



Fruit &
veggie scraps

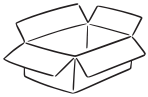
Tea leaves

Tea bags &
Coffee grounds

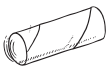
Egg shells

Browns (Carbon)

Soaks up any additional moisture



Cardboard &
Shredded paper



Toilet rolls

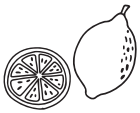
Egg cartons

Dried crunchy
leaves

Small Amounts

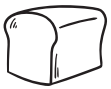
Feed these in moderation

Onions



Citrus

Avocado Pits



Bread

Avoid

These are a no-go for your worms

Meat & Bones

Dairy Products

Chilli

Fats or Oils

The recipe for success

Your worm farm checklist

Worms

Only use composting worms in your worm farm: Tiger Worms, Red Wrigglers and African Night Crawlers will survive and thrive in your worm farm. All Tumbleweed Above Ground worm farms require 1,000 worms to get started.

Position

Worms need a sheltered position, in the shade. The ideal temperature for your worms is about 18 to 25 degree Celsius. If it's too hot or too cold they will slow down and eat less.

Food

Feed your worms a variety of Green and Browns - the greater the variety or organic waste you feed your worms, the better your castings and liquid fertiliser will be.

Aeration

Worms breathe air! Your worm farm is an aerobic system, meaning it needs oxygen. Every time you feed your worms, mix the contents of the working tray. This will ensure you worm farm is aerated so your worms can thrive.

Drainage

While you want your worm farm to be moist, your worms will drown if it becomes too wet. Keep the tap open with a bucket underneath to collect Worm Liquid and allow excess water to drain. If your worm farm is looking dry, add some water. If your worm farm is looking wet, add more Browns.

Darkness

Worms love the dark! Keep the surface of your Working Tray covered with a breathable Worm Blanket.

Fun Fact

Worms can sense changes in air pressure.
When it's going to rain, worms will move into the lid of your worm farm.

This is a natural response to move to higher ground to avoid drowning. Don't worry! The worms will return to the Working Tray when the rain has passed.

Maintaining your worm farm

Your guide to success

Position

Worms are seasonal creatures, so it is important to place your worm farm in a location suitable to the current weather. Like us, worms do not thrive in temperatures we find uncomfortable. Indeed, in extreme hot or cold conditions they may not survive. Your worms need a shady, sheltered position all year round. Where possible, place your worm farm close to the kitchen so it is convenient to maintain and feed with your kitchen scraps.

Summer

During warmer months, keep your worms in a cool, shady and sheltered spot away from direct sunlight. This could include under a tree, on your balcony, in your kitchen, garage or basement.

TIP

On very hot summer days, try freezing a water bottle, wrapping it in newspaper and placing it into the top Working Tray of your worm farm. This will help to keep your worms cool.

Winter

During cooler months, particularly in frosty climates, keep your worms in a warm and sheltered spot. This could include in your garage, basement, shed, or against a sheltered wall of your house.

TIP

On cold and frosty days, place a towel or piece of old carpet over your worm farm. This will protect your worms from becoming too exposed to very cold conditions.

Food

It's important not to overfeed your worms! Overfeeding is often the main cause of imbalance in the worm farm where issues can arise. As a guide, feed your worms as much as they will eat. When starting your worm farm, start small - try adding a handful of kitchen scraps and a handful of shredded paper. As your worms increase in population they will be able to consume more food.

Worms are able to process your organic waste more efficiently when it's been chopped into smaller pieces. It will take your worms a few months to breed and grow their population to fill the worm farm.

Once established, Tumbleweed worm farms will recycle 3-6kg of organic waste every week, depending on the type of worm farm you have.

Fun Fact

Worms can eat half their body weight in food every day.

Maintaining your worm farm

Your guide to success

Aeration

Each time you feed your worm farm, mix the contents to ensure old and new food scraps are combined. This will aerate your worm farm to supply oxygen to your worms, while giving the worms greater access to food. Use a Tumbleweed Worm Aerator or a garden tool to aerate.

By adding oxygen to your worm farm, you are maintaining an aerobic system, enabling the good bacteria in your worm farm to thrive, and restricting the anaerobic bacteria from growing.

TIP

Don't overfeed your worms!
Overfeeding your worms will restrict air movement, causing anaerobic bacteria to breed which will cause the worm farm to smell. If your worm farm is starting to smell, give the contents of the top Working Tray a good mix, and stop feeding your worms for a few days to allow them time to process the food already in the worm farm.

Drainage

Worms love a damp environment, so long as the water can drain and they can breathe air. Always leave your worm farm tap open with a bucket underneath (the Tumbleweed Cube® already contains a built-in Collection Container) to allow excess moisture to drain away. We recommend you never store water in the Collector Tray because it can become stagnant and inhibit airflow that your worms need to breathe. Ensure your worm farm is on level ground, so that water can't pool in the base of your worm farm.

Too Wet

Your worm farm can become too wet if your adding mainly kitchen scraps (greens). If your worm farm is looking too wet, it's important to reduce this excess moisture to maintain a healthy worm farm. Add some brown (carbon) material to help soak this moisture up. Some good sources include corrugated cardboard, shredded paper and dried crunchy leaves. Mix these into the top Working Tray.

Too Dry

During warmer months, your worm farm can become dry quite quickly. If your worm farm is looking too dry, pour some water into the top Working tray and mix well. Start with 1L of water and add more if needed.

Fun Fact

Your kitchen scraps are made up of almost 70% water.

Maintaining your worm farm

Your guide to success

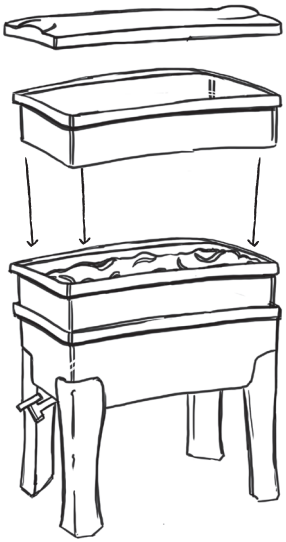
Darkness

Worms are sensitive to the light, and with light sensing organs on their skin, it's important to keep them in the dark. Always keep the lid secured when not feeding your worms, and ensure the surface of the top Working Tray is covered with a Tumbleweed Worm Blanket. This will encourage your worms to migrate all the way to the surface to feed, making your worm farm more efficient.

Your worms will eventually eat the worm blanket as it's made from organic fibres. When your worm blanket starts to break down, remember to buy a new one, or alternatively use a hessian bag or an old cotton t-shirt. Don't be tempted to use thick newspaper as this can restrict the air flow which can suffocate your worms.

When to add a new worm farm tray

You know that your worm farm is ready to add a new tray when the current top Working Tray is filled about 5cm for the top and most of the food scraps in this tray are no longer visible.
When adding a new tray, the trays need to 'connect', so the worms can travel. Stack this Working tray onto your current top Working Tray, moving a few handfuls of the bedding material in the new tray to encourage the worms to move upward.



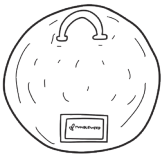
The new tray that has been added becomes your top Working Tray where you feed your worms. A worm farm can have multiple working trays. By increasing the number of working trays in your worm farm, you are allowing your castings to mature for longer, and you are allowing your worm population to increase, which will make your worm farm more efficient.

Worm farming tools

Improve your worm farm health

Tumbleweed® Worm Farm & Compost Conditioner

Worm Farm and Compost Conditioner helps neutralise acidity and balance pH levels so your worms can digest larger quantities of food waste faster. It helps soil bacteria preserve essential nutrients and increases the availability of nutrients for plants. It also helps reduce odours and pest infestations. Add half a lid-full into your worm farm once a week.



Tumbleweed® Worm Blankets

Worm Blankets increase activity in your worm farm. Made from breathable 100% natural fibres, and with a convenient handle, our Worm Blankets create the dark, moist, aerated environment that compost worms thrive in. Place your blanket over the food scraps in the top Working Tray. Worms will eat your blanket, so replace every 4-6 weeks.

Tumbleweed® Worm Farm Aerator

The Worm Farm Aerator will aerate and turn over the material in Worm Farms with ease, to promote microorganisms and worms to break down food faster. A compact hand tool designed to stay inside your worm farm for convenience.

Tumbleweed® Organi Bin

The Organi Bin is ideal for collecting your kitchen scraps for recycling in your worm farm. The Organi Bin is a large 7L capacity benchtop caddy with a replaceable carbon filter that fits into the lid to eliminate odours. The convenient carry handle allows for easy transporting of your food scraps from your kitchen to your worm farm.

Tumbleweed® pH Tester

The pH Tester is the ideal tool for measuring the pH level in your worm farm. The pH Tester measures pH level, moisture, temperature and light levels to enable you to better manage your worm farm. This tool can also be used in your garden.

TIP Scan to view all of our Tumbleweed Worm Farming Accessories

Harvesting nutrients and soil conditioner

Worms castings and worm liquid

One of the great benefits of having a worm farm is the worm castings and worm liquid that they produce from your organic waste. These wonderful substances are excellent for the soil as they help increase its water retention, improve soil aeration, and produce better-quality flowers, fruit and vegetables by providing a very well-balanced supply of nutrients.

1 Worm Liquid

As they feed, worms excrete a liquid that is full of nutrients and beneficial microbes that are brilliant for feeding and improving your garden soil thus helping your plants thrive.

Simply open the tap connected to the Collector Tray and empty into a container (the Tumbleweed Cube® already contains a built-in Collection Container). It's best to leave your tap open at all times with a bucket underneath, if possible. Dilute the worm liquid with water (10:1 ratio) so that it ends up the colour of weak tea.

TIP Collect your worm liquid every few days to prevent it becoming anaerobic and smelly.

How to use your worm liquid

Watering your garden

Simply add your diluted worm liquid into a watering can. Water over your plants leaves and at the base of the stem so that the plant can absorb the nutrients.

Add nutrients to indoor plants

Place your diluted worm liquid into a spray bottle and spray directly onto the leaves of your indoor plants.

Turning worm liquid into worm tea

If you want to increase the levels of beneficial microbes in your worm liquid, there is a process and this is often referred to by worm farmers as creating a worm tea.

Add a sugary substance such as molasses to the worm liquid and then bubble air through the resulting liquid (you can use an aquarium pump to achieve this). The aeration and extra sugar cause the original microbes present to breed up quickly thereby supercharging the worm liquid.

This can be watered onto your garden.

❷ Worm Castings

Once your worm farm has been up and running for at least three to six months, it's probably a good time to start thinking about harvesting the valuable castings (worm manure). Worm castings can be harvested every few months generally, once a worm farm is established.

When to harvest castings

- Your worm farm should have two Working Trays.
- The top Working Tray must have been added roughly 3-4 months ago, and is almost full.
- The bottom Working Tray has no visible food scraps.
- The colour of the material in the bottom Working Tray is a very dark, chocolate brown and is the consistency of fine mud.

TIP

To read more on harvesting castings, check out our blog article on our website!

How do I harvest worm castings?

Entire tray method

Empty the bottom Working Tray onto a sheet of plastic, or similar surface, and you will find that any worms on the surface will start to burrow down away from the light.

Scrape of the top layer of worm castings away and place into a bucket, removing any unprocessed kitchen scraps back into the original pile which will eventually go back into your worm farm.

Continue scraping until you encounter worms, then wait until they burrow down before repeating the process of scraping the top layer into your bucket.

You will end up with a small pile full of worms that can go back into your worm farm.

Handful method

Place a new layer of worm food such as kitchen scraps into the Top Working Tray of your worm farm. Only cover half the surface to encourage the vast majority of worms to migrate to the food.

Push aside any unprocessed food scraps on the opposite side of the Top Working Tray to reveal the worm castings. Simply remove handfuls of worm castings into bucket, returning any worms back into the worm farm.

TIP

If using the **Entire Tray Method**, cycle your emptied tray to become your new top Working Tray and the process starts again!

What can I use my worm castings for?

You may want to dry the castings out for a few days if they are really wet and hard to separate. Wait until they have a crumbly texture to make them much easier to work with. Alternatively, if you want to use them straight away, scoop out a few handfuls of the moist castings into a bucket or watering can and make them up into a slurry that can be watered onto the soil or pot plants. This is an excellent way of getting them down to the roots of established plants.

Potting Mix

Add worm castings to a potting mix when potting plants.
About 1 part castings to 4 parts potting mix is a good rule of thumb.
The 'slurry method' of distributing worm castings (mentioned above) is a great way to re-invigorate large potted plants.

Add to your garden

The general rule of thumb for castings to soil ratio, is that for every handful of castings added, you need 4 handfuls of soil (1:4). Here are a few situations in which you can add lots of castings (such as an entire tray):

New garden beds

Whether for flowers or food, digging in castings before you plant will be an excellent way to get plants established. A 5cm layer placed on top and then dug in to the depth of your spade works well.

Established garden beds

The slurry method is a great way to get castings into areas of the garden where it is hard to dig them in. For example, around trees, shrubs (e.g., hedges) and on lawns. The slurry will distribute the castings and be available to native worms in your soil to eat and distribute through the soil around the plant roots.

TIP

To read some ideas on getting growing, scan here.

Fun Fact

Worms regulate their population. Worms will breed to fill the space! Then they will slow down their reproduction and maintain population levels.

When fully established, a healthy worm farm will have about 20,000 worms actively recycling your kitchen scraps into a rich fertiliser

Worm Farming FAQ's

Your most common questions answered

How much will my worms eat?

Worms can eat up to half their body weight every day, and double their population every few months. Feed your worms as much as they will eat. As you become familiar with your worms you will learn their rate of food consumption. If you are feeding too much, the excess food will go anaerobic and smell, stop feeding for a few days or even a week, add 1/2 a cap of Tumbleweed® Worm Farm & Compost Conditioner and mix well.

How can I help my worms to eat more?

Worms will feed at a faster rate once they have adapted to any new food source, but there are some things you can do to help them along:

- Mash, blend or cut up the food scraps into small pieces;
- Bury food within the worm farm by scraping away the top layer and creating space to place the new food so the worms have maximum access;
- Control the temperature to around 24°C (70°F) to keep your worms in the best possible conditions for feeding and growth.

Can I feed my worms garden clippings?

Not usually. Tumbleweed® Worm Farms are designed to break down soft organic food scraps. Composting garden clippings using an aerobic composting method is best achieved in a Tumbleweed® 110L, 150L, 170L, 220L 240L, 400L Compost Bin, designed to compost garden waste.

Why aren't my worms eating my food scraps?

It will take your worms about six weeks to become established in your new worm farm. If your worms aren't eating your scraps, they may still be eating your Worm Farm Bedding Block. Mix your food scraps into the bedding to make them more accessible to your worms, and stop feeding until your worms have eaten most of the existing scraps.

Should I add water to my worm farm?

Food waste usually contains about 70% water which is released as worms break down the food. This will tend to stay in the bedding for a long time before eventually draining out. Only add water to your worm farm if the bedding is looking dry, or if you would like to harvest liquid fertiliser on-demand. When adding water to your worm farm, always ensure the tap is open with a bucket underneath, to allow any excess water to drain away.

Worm Farming FAQ's

Your most common questions answered

Help! My worm farm smells.

A well-managed worm farm should smell pleasant and earthy. If your worm farm has a bad smell, it's generally because the balance of carbon to nitrogen is off, or you have overfed your worms. The lack of air favours particular species of bacteria that break down organic materials to produce things like methane and rotten egg gas that are not good for our worms. Stop feeding the worms, add Tumbleweed® Worm Farm & Compost Conditioner (see page 18) and shredded paper or cardboard, and use an aerating tool to mix well. Start feeding again once all smells are gone.

Why are my worms gathering in the lid?

Worms are sensitive to air pressure changes in the weather and can sense when it's going to rain. In their natural environment, moving to a high position nature takes them out of the soil to protect from them drowning. If you find worms gathering in the lid of your worm farm. It is generally nothing to worry about unless the conditions in your worm farm are staying permanently too wet, from overfeeding.

Will I get too many worms in my worm farm?

You will never have too many worms in your worm farm. Worms regulate their population to the confines of the available space and amount of available food. Your worm population should reach 5,000 to 10,000 worms after about 12 months, and under ideal conditions up to 20,000 worms.

Why aren't worms moving up from the lower levels into the top working tray?

This situation can arise for two reasons. First, you may be adding new food too soon before the worms can eat the previous food. This will result in a lot of uneaten scraps being distributed throughout the system and a general reluctance by the worms to migrate upwards while they can still access material lower in the system.

Before adding new trays, stop feeding the worms for at lease a week to ensure that all existing food in the lower tray has been eaten. Worms will move up to eat from the surface as this is their natural pattern of behaviour.

Secondly, you may not have waited for the level of worm castings in your Top Working Tray to get full enough before adding a new tray. This will create a gap between the trays preventing the worms from reaching the top tray. If there is a gap between any two working trays, simply lift off the top tray and add some organic soil or organic potting mix to the tray beneath, put the top tray back on and continue operation.

Worm Farming FAQ's

Your most common questions answered

Can I put compost worms in my garden?

Compost worms can be added to the garden so long as you add a thick layer of mulch. Compost worms require moist conditions all year around as they don't tend to tunnel deep like earthworker worms to find moisture.

Why are worms eating my blanket?

Tumbleweed® Worm Blankets are made from 100% natural coir fibre. Worms will eat anything organic, so it's normal for worms to eat your blanket. You can expect your blanket to last for 4-6 weeks before needing a new blanket. If your worms have a regular food source of kitchen scraps, then your blanket is likely to last a bit longer as the worms will be focused on eating the food in your worm farm.

Why is there mould in my worm farm?

Mould is normal in a worm farm, and will form when the conditions are right. It is not harmful to the worms, and is a natural part of the decomposition process. The addition of different food scraps can cause different types of mould to form on the blanket and food scraps in your worm farm. Mould tends to form in conditions that are undisturbed, so simply mixing the contents of the worm farm will help reduce the mould formation.

What do I do if I'm going on holiday?

Leaving your established worm farm for 3-4 weeks without constantly adding food is not a problem. Add a good slow release food source before going on holiday, such as lucerne hay or, alfalfa chaff or pea straw in a thick layer at least 5cm deep. Water this well with about 2L of water, ensuring you have your tap open and a bucket underneath. Ensure the surface of the top Working tray is covered with a damp Tumbleweed® Worm Blanket and your worm farm is in a sheltered position away from direct sunlight.

Creatures in my worm farm (A-Z)

A healthy worm farm contains a whole ecosystem of fascinating living organisms.

Most of the creatures you find in your worm farm will be working together with your worms to break down organic matter. Different species thrive under different conditions, and seeing certain species can be an indicator that the conditions of your worm farm are out of balance and need attention. Not all creatures are beneficial in your worm farm, below is a list of the most common creatures, why they are in your worm farm and how to bring your worm farm back into balance.

Ants

Ants don't harm worms, but they do compete with your worms for food scraps in the worm farm. They can play a vital role, while burrowing and tunneling through your worm farm they assist in mixing the contents.

Reason Your worm farm is too dry.

Solution Pour water on top of the worm blanket to promote moisture and higher humidity. Add more water dense food scraps. Place all of the legs of your worm farm in containers filled with water and add a drop of vegetable oil.

Bacteria

There are millions of bacteria in your worm farm that you will never be able to see. You may be able to smell them from time to time if your farm is out of balance which means your worm farm has become anaerobic.

Reason Your worm form is oxygen-poor.

Solution Aerate the contents of your top Working Tray, add some Tumbleweed® Worm Farm & Compost Conditioner and give the worms time to process all the food in the worm farm before feeding them again. Remember to mix and aerate your worm farm every time new food is added. This motion promotes a healthy aerobic environment.

Beetles

There are many different species of beetles and they vary a lot in their feeding habits. They will find their way into your worm farm to break down food scraps.

Reason They are here to feed on your food scraps.

Solution Try to increase the amount of times that you aerate your worm farm. Any beetles that you encounter in your worm farm are unlikely to become a problem in your garden, so there is no need to worry.

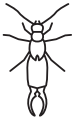
Cockroaches

Cockroaches don't harm worms, but they do compete with them for food.

Reason Your worm farm is too dry.

Solution Pour water on top of the worm blanket to promote moisture and higher humidity. Try to increase the amount of times that you aerate your worm farm.

Earwigs



Earwigs feed on dead plant matter and are good decomposers when they are in your worm farm.

Reason They are here to feed on your food scraps.

Solution Aerate the contents of your top Working Tray, add some Tumbleweed® Worm Farm & Compost Conditioner. Remember to mix and aerate your worm farm every time new food is added.

Fungi

Masses of cobweb-like threads growing on the food in the worm farm will be various species of fungi that are helping with the breakdown process.

Reason You have overfed your worm farm. There is high humidity outside.

Solution Fungi is a natural decomposer that appears when food waste is sitting undisturbed. Reduce the quantity of food waste added to your worm farm to allow the worms to consume this before fungi can grow, and aerate. Remember to mix and aerate your worm farm every time new food is added.

Mites

Oribatid mites, sometimes known as soil are the species you are most likely to observe in your compost bin or worm farm. These creatures often resemble tiny brown balls clumped together under your worm farm lid. If you get close, you will see that they have 8 legs. They are assisting the breakdown process.

Reason They are here to feed on your food scraps.

Solution Mites are nothing to worry about, rather, they are beneficial creatures of the compost.

Pot Worms

Pot worms are tiny white worms that do not do any harm to your worms, however, the conditions they favour will tend to eliminate your worms.

Reason Worm farm is too acidic and wet.

Solution Add carbon rich material, such as shredded paper or cardboard, to bring back the right air:water balance in the worm farm. Add Tumbleweed® Worm Farm & Compost conditioner to balance the pH level.

Slaters, Roley Poley, Wood Lice or Pill Bugs

These species feed on dead plant matter and are good decomposers in your worm farm. They don't harm your worms but do compete with them for food.

Reason They are here to feed on your food scraps.

Solution To ensure they don't overrun your worm population, make sure you chop you food scraps into smalled pieces and always mix to combine new food into the worm farm so they can be broken down by worms more quickly. When they leave your worm farm, these creatures may potentially feed on live plants such as seedlings in the garden.

Slugs & Snails

Snails and slugs are a valuable part of ecosystems, as they will eat through and break down material faster than just the composting process can.

Reason They are here to feed on your food scraps.

Solution If their numbers build in a worm farm, you can either take them out by hand, or leave some damp paper on top of the blanket overnight, this will attract the slugs snails. Remove the next morning.

Soldier Fly Larvae

Soldier Fly Larvae are large white segmented maggots that will often appear from the end of Spring when the weather is heating up. They do not do any harm to your worms, however, the conditions they favour will tend to eliminate your worms.

Reason Worm farm is too acidic and wet.

Solution Add carbon rich material, such as dry crunchy leaves, shredded paper or cardboard, to bring back the right air:water balance in the worm farm. Add Tumbleweed® Worm Farm & Compost conditioner to balance the pH level. Remember to mix and aerate your worm farm every time new food is added.

Springtails

Springtails are tiny white oval shaped creatures that are 1-3mm in length. They devour vegetable matter as it decomposes and are usually found in habitats where conditions are very moist. They can also be found in clumps at the base of your worm farm, and can often be seen in your worm liquid.

Reason They are here to feed on your food scraps.

Solution Springtails are nothing to worry about, rather, they are beneficial creatures of the compost.

Vinegar Fly or Fruit Fly

These tiny creatures are a symptom of rotting food and are a pest. They are attracted to your worm farm when there is too much food for the worms to process and when new food has not been mixed into the working tray when added.

Reason You have overfed your worm farm.

Solution Only feed worms as much as they can eat and chop food into smaller pieces. Add Tumbleweed® Worm Farm and Composting Condition and mix well. Remember to mix and aerate your worm farm every time new food is added.

Get in touch!

1300 137 356

sales@tumbleweed.com.au

14b Williamson Road, Ingleburn
NSW 2565, Australia

tumbleweed.com.au