Ant Care Sheet

Species: *Messor barbarus*
Common name: Harvester Ant
Colony form: Monogyne (single Queen)
Sizes -
Workers: 3-14 mm
Queen: 15-18 mm

Information:

Messor barbarus are quite a common European ant species, living mostly in the South. They are called "Harvester ants" because they collect seeds and chew them in groups to make 'antbread'. The antbread is then eaten by the colony. The seeds are stored inside the nest in chambers called 'granaries'. Queens of this species are monogyne which means that there is only ever a single Queen in the colony. Their natural nests are usually constructed underground and they generally prefer a dry environment.

Messor barbarus have three castes of workers; minor, media and major. The minor workers are the smallest workers who tend to the Queen and work around the nest. The media workers are slightly larger and chew seed in groups with the major workers. They also are the foragers of the colony. The major workers are the largest caste in the colony and defend the nest.

Messor barbarus can be kept at room temperature, when kept in captivity, but many ant-keepers prefer to keep the colony around 25 degrees Celsius. This is to mimic their natural environment. Heat mats are usually used to maintain a steady temperature, along with thermostats to control the temperature accurately. ***Messor barbarus*** are can prove quite difficult to raise from a single Queen at low temperatures, sometimes Queens do not lay any eggs at all unless they are in a hot, dark environment with no disturbances. ***Messor barbarus*** single Queens should always be hibernated at 15 degrees Celsius after they have been caught in a nuptial flight. This gives them a good long rest and a successful colony foundation usually follows after hibernation.

Mating flights are very big in summertime and many Queens go and found successful colonies. ***Messor barbarus*** hibernate through the winter and wake from hibernation around late March. Hibernation can be achieved by reducing the temperature of the nest to around 15 degrees Celsius but not any lower than this.

Feeding:

Messor barbarus will accept different types of food, the main source being seeds. A variety of seed can be given; usually bird seed mixes are widely accepted. If you don't have any bird seed, or prefer to feed separate seed types, you can give the following:

- Rapeseed
- Dandelion seeds
- Grass seed
- Flaxseed
- Canary seed
- Sunflower hearts

*One thing to always ensure it that the seeds are free of any pesticides. You can do this by purchasing organic seeds or collecting natural seeds yourself.

Regular protein for the development of the brood should also be given in the form of live/dead insects or meat such as cooked chicken. It is generally said that giving live food to small colonies of ants is not the wisest of moves as they will be unlikely to kill it. Mealworms are commonly given as a source of protein. You can buy live mealworms and when you want to feed the colony, you select a young mealworm with a soft outer shell and dip it into hot/boiling water to kill it. After this, you can place the mealworm for the ants to eat. Dipping the mealworm in boiling water ensures that it is fully dead and that any nasty microbes are killed. Along with mealworms, the following insects are suitable for a colony of ***Messor barbarus***:: bluebottle flies, fruit flies, spiders, wasps, bees, moths, crickets, locusts, waxworm, beetles, other ant species and many more! ***Messor barbarus*** do not openly accept sugar/honey water. Only if there is not water source for them, the ants will drink sugar/honey water.

Formicarium Choices

When it comes to choosing a formicarium for ***Messor barbarus*** you need to take into account that a dry area needs to be established where the seeds can be stored in the nest without germinating. The list below tells you the two most popular types of formicariums for ***Messor barbarus***.

- Ytong nests

Ytong nests are a type of aerated concrete block which can be carved manually or by machinery to produce interesting patterns. They are very efficient because you can control moisture content by filling water troughs to the desired level and the clear acrylic cover allows excellent viewing of the ants. They are available in many different sizes and have intriguing chamber designs. You can also have all-in-one Ytong nests which include a foraging area on the top of the nest. The Ytong is white in colour which really helps to make ***Messor barbarus*** ants stand out. This is a good choice for people who love watching their ants work and an excellent choice for ***Messor barbarus.*** This type of formicarium also allows you to keep a dry part in the nest for seeds, so that they do not germinate.

- Soil/Sand-loam nests

Soil nest set-ups are also used as a natural type of formicarium as it allows the ants to dig their own nests. Soil nests are available as slim-line versions which consist of two glass panels which as sealed and have a gap in between in which you can fill with soil or a sand-loam mix. Tanks are often used too as they provide a big space for ant colonies to grow and the space above the soil can be used as a foraging area. This is a good formicarium which has the ability to replicate outdoor environments well. Make sure that the nest is not all damp because seed germination can be a real issue if all of the nest is wet.

Beginner notes:

- ***Messor barbarus*** are probably second to one of the easiest ant species to keep but the first colony founding stages can prove difficult if the Queen is not given a hot environment of around 25 degrees Celsius.
- Try not to disturb a young colony/Queen with vibrations such as tapping on the formicarium or excessive handling of the test tube that the colony resides in. This will stress the Queen out and she will cease to lay eggs for sometime or begin eating her own eggs which is not ideal.

- ***Messor barbarus*** also like to live in the dark so keeping the nest dark is a good idea. Covering the nest with red acetate allows you to see the ants and the red colour cannot be distinguished by the ants, so they perceive it to be dark.