



## Raising Earthworms<sup>1</sup>

Ronald A. Howard Jr.

Professor and Extension Specialist, State 4-H Office, 7607 Eastmark Drive, Suite 101, College Station, TX 77843-2473

Earthworms of some type have nearly universal appeal as fishing bait. The worms may be dug from the ground or decaying vegetation, picked up from moist areas at night, captured using a worm fiddle or some other device, or purchased from bait dealers. Many types of worms can be grown as fish bait. Climate and the tolerance of the worms for heat or cold imposes limits on the production of earthworms or the selection of worms that can be raised in some parts of the country. Large types commonly called "night crawlers" or "dew worms" and smaller types like "red wigglers" or "ringed worms" are commonly raised for bait or other uses.

In the wild, worms eat detritus, decaying organic matter and tiny soil organisms. They respire through the surface of their skins, so that surface must remain moist at all times. They grow best under cool to moderately warm conditions, depending upon the species being grown. Most species are relatively intolerant of high levels of sand in the soil. As a result, the soil or rearing medium must be composed of a mixture that avoids sand, and its moisture and temperature levels must be controlled within the tolerance limits of the worms. Best production will occur when they are held at the optimum or preferred range for the species. Food must be supplied to promote rapid growth and reproduction.

### Materials and Equipment

Earthworms can be reared in buckets, tubs, above ground boxes, and rearing pits. In each case, the rearing containers should provide for adequate drainage while preventing smaller worms from escaping the container. Some growers place screened rearing boxes on rearing tables covered with a layer of sand. The boxes are made of rot resistant wood that contains no preservatives or poisons that can kill the worms. They are large enough to hold and grow a significant number of worms, but small enough that they can be handled easily when worms are to be harvested or sorted, or when growing media are being changed. Protection from predators is important in most areas.

A good worm growing medium can be made by mixing equal parts. Where summers produce temperatures in excess of the tolerance or productivity limits for the worms being raised, shade or other means of keeping the worms cool is absolutely essential to production. The following materials are needed to make a worm rearing facility.

---

<sup>1</sup>These materials are adapted from *Raising Earthworms*, a publication of the Southern Regional 4-H Wildlife Literature Committee

## Setting up a Worm Rearing Facility

### Rearing Worms

#### Additional Information Sources

#### Extensions and Connections to Other Programs

Clearly, rearing worms can have a direct link to conservation or natural history programs. It could also provide an entry into entrepreneurship programs if the participant decides to raise worms for sale to bait shops or direct sales to anglers or if the dried worm castings are sold to gardeners or others wanting an excellent soil amendment. Gardening or horticulture projects can be enhanced by participation in a worm rearing project. Woodworking or other engineering projects could become related if building projects are included.