

Examining the periodical cicadas' nymphal tunnels

Project: Examine the variation in the tunnels that periodical cicada nymphs have dug during the past year.

Materials needed: Plaster of Paris, garden trowel, and ruler.

Procedure: Mix the Plaster of Paris as directed on the box. Carefully pour the plaster down an emergence hole and let it set for 48-72 hours. Using a garden trowel, carefully dig around the hardened plaster to remove the cast of the tunnel. Do not worry if it should break, you can easily glue the sections together.



Once removed from the soil, trace the outline of the plaster casts on paper. How deep were the tunnels? Did they have any enlarged chambers at the bottom? These chambers enabled the cicadas to turn around while in the chamber. Did the tunnels vary in shape?