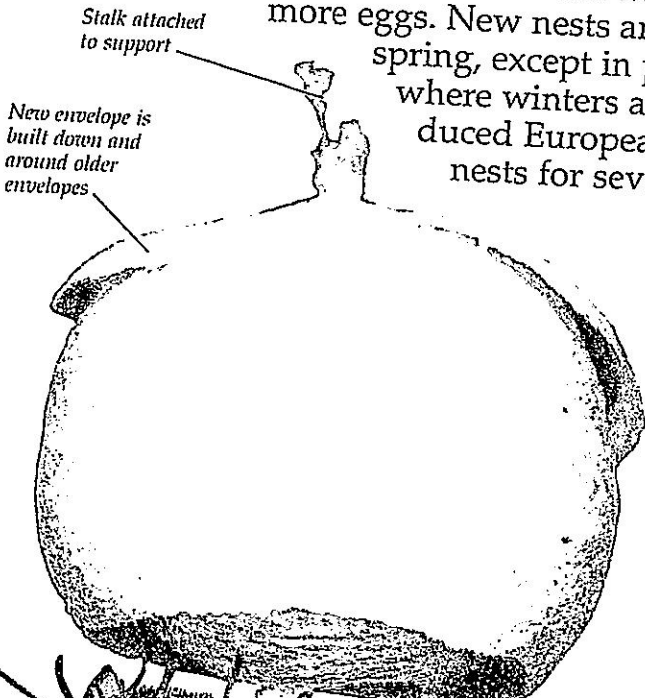
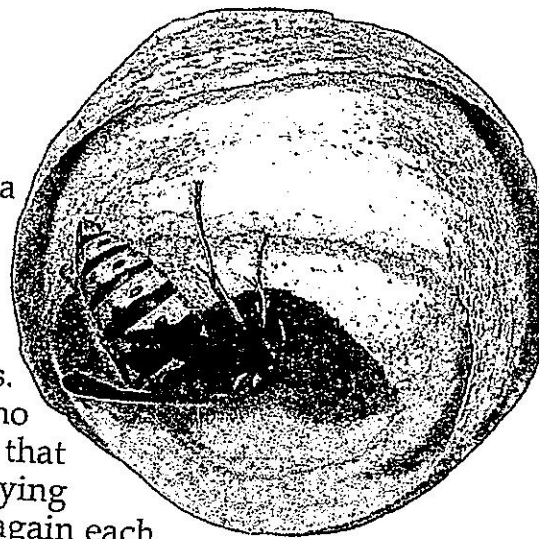


# Building a nest

**THE START**  
The common wasp queen (*Vespula vulgaris*) starts a nest by building a short stalk with a cap, covering a comb of four or five cells. She lays one egg at the bottom of each cell.



THE NESTS built by the common wasp (*Vespula vulgaris*) are always begun by a single queen working on her own. She builds a series of papery envelopes from chewed-up wood fibers and lays her eggs inside. She must safely rear her first batch of eggs through to adults. These then become the first workers who expand the nest and forage for food, so that the queen can remain within the nest laying more eggs. New nests are always built again each spring, except in parts of New Zealand where winters are mild enough for introduced European wasps to maintain their nests for several years.



**1 INSULATING LAYERS**  
The queen builds a series of envelopes around her small comb. These layers insulate the developing larvae from cold winds. The nests of the common wasp are always built with the entrance at the bottom, but some tropical wasps' nests (pp. 5

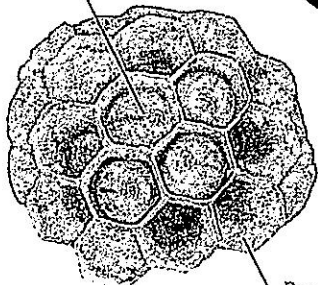
**CARING FOR THE EGGS**  
When the eggs hatch, the queen must collect caterpillars as food for the developing grubs. She must also collect more material to extend the walls of the nest.

**3 KEEPING GUARD**  
The nest entrance is now a small hole. This is easier to defend from other insects, including queens who might try to take over the nest. Keeping the hole small also makes it easier to control temperature and humidity around the developing grubs.

**2 THE WHITE HOUSE**  
This queen has found a source of nesting material which is almost white. She will visit this, between feeding her grubs, and chew away some wood fibers to make the "paper" from which she builds the nest.



Developing grub



**LARVAE**

On their rich diet of chewed insects and caterpillars, the grubs are growing fast, each in its own cell. The time from egg to adult varies with the temperature and the amount of food available, but it is usually about five weeks.

