CHAPTER SEVEN

# Mud Nests

**The ornithologist I. Rowley discovered that mud is a vital material in nest building for only about 5 percent of species, and only a small proportion of those build their nests wholly or mostly of mud. These few species utilize the technique of molding to obtain the nest's desired shape. A mud nest lasts well and may be used the following season, either by the builder after repairing it or by another species requisitioning it.**

Mud nests are found in various shapes. The swallow family's nests may be cup-shaped or retort-shaped. A cup-shaped nest is built by the Barn Swallow (*Hirundo rustica*) of the Northern Hemisphere, as in the picture above where it appears on a man-made building. Retort-shape nests are built by the Fairy Martin (*Hirundo ariel*) of Australia.

In another variation on shape, the Western Rock Nuthatch (*Sitta neumayer*) builds a flask-shaped structure with an entrance tunnel up to 4in (10cm) long. The chamber is lined with soft materials. It is mostly built by the male, taking 10–18 days, and might be used for several years. The completed nest may weigh over 70lb (32kg), while the bird weighs about 1½oz (35g).

There are several advantages to using mud for nest building. One good reason for using mud is its structural convenience; the nest can be molded into the required shape, as shown by the nest architecture of swallows and martins. The mud sticks well, even to vertical surfaces, and once dry can be extremely tough. For instance, the Bare-Headed Rockfowl (*Picathartes gymnocephalus*) is able to stick its nest on to a vertical rock face.

Another merit of mud is its durability in dry conditions. The Barn Swallow, for example, reinforces its mud nest with grass and lines it with feathers. This nest is so strongly constructed that it is often used in successive years.

A disadvantage, however, is that water is needed to make mud; this restricts the time and location for building nests. It can take the White-winged Chough (*Corcorax melanorhamphus*) several months to construct its nest if there is a lack of rain. The reuse of nests can cause problems: it encourages the build up of bloodsucking nest ecto-parasites; for example, Cliff Swallow (*Hirunda pyrrhonata*) nests can be infested with swallow bugs.

This chapter explains how birds succeed in the painstaking construction of mud nests.

RIGHT
**MOUNTAIN DWELLER**
*The Western Rock Nuthatch breeds in rocky, mountainous regions from Serbia to Iran. The nest is in a rock crevice and features an inner cup of moss, hair, and feathers, sealed in with a cone-shaped mud front.*