

THE ARCHITECTS OF AFRICA

PICTURES BY THE AUTHOR



Mention “termite” in our urban setting and we instinctively reach for the phone to call pest control. Having these critters literally gobbling up our hard-earned house is too horrible to contemplate.

In Africa’s safari country where nature still rules, termites are, however, welcome and productive members of society. Across Southern and East Africa termite mounds are edifices of these critters at work, making a meaningful contribution to the ecosystem.

Scattered over the landscape these mounds come in interesting shapes and designs—both as independent structures or as part of the tree on which the termites feed.

“This is why I prefer to call them the architects of Africa,” I observed as I beckoned our field guide to stop our vehicle for a closer look at a termite twin-tower. “Magnificent, aren’t they?”

He nodded in agreement. Most field guides or rangers are, like me, fascinated by termites.

In Africa termites are also referred to as white ants. The very first authoritative study of these industrious insects was undertaken by the famous South African author and poet, Eugene Marais. Having spent ten years in the field observing their breeding and work patterns, Marais concluded in *The Soul of the White Ant*, first published in 1937:

“The functioning of the community or group psyche of the termitary is just as wonderful and mysterious as that of people. It has, however, a very different kind of psyche, similar to telepathy or other functions of the human mind which border on the supernatural.”

Starting with the mating process where an aspiring queen lures the future king over “incredible distances” with “a signal... far beyond our own senses,” Marais goes through every phase of the termite’s life cycle from the preparation of a hollow chamber for Her Majesty several feet below ground to the construction of magnificent mounds.



The king grows only slightly larger after the initial encounter and continues to mate with the queen for life, which can be as long as a half century. In other ant colonies a queen mates once and the males die shortly afterwards.

Scientists estimate the egg production of some termite species found in Africa to be as high as 50,000 a day! This may add up to 25 million eggs during the average lifespan of the queen. Volume is much needed, considering that one aardwolf can devour up to 200,000 termites in a single day!

Worker termites forage, stores food, enlarge and maintain the nest while soldier termites, with their enlarged jaws, defend the realm against attacks from other ants. Regardless of whether they feed on soil, dry or damp wood or grass, all termites rely on cellulose for energy. Their waste not only nourishes a fungi garden underground but mushrooms on the surface of the mound.

Termite mounds are not merely haphazard soil dumps. Carefully sculptured, they come in elaborate and distinctive forms, designed for efficient thermo-regulation. The column of hot air rising in the mounds helps drive air circulation currents inside the subterranean network. Temperature control is essential for fungal gardens and general comfort.

Zimbabwean architect Mike Pearce freely admits having been inspired by termites in the design of a Harare shopping center and office block with its effective passive cooling air flow.

In Africa soil from termite mounds have been used in road construction. The secretion used by termites to harden the mounds makes for effective, more durable and cheaper surfacing than asphalt roads. The soil of a mound can also provide clues to geologists and



Hyena



Warthogs

HOMES BY TERMITE INC.



Dwarf Mongoose

ON THE LOOKOUT MOUND



Yellowbill Hornbills



Chacma Baboon—male, no doubt



Impala



Leopard



Francolin



Kudu bull

mineral prospectors to what is underground. In fact, the largest diamond mine in the world, in Botswana, was discovered by examining a termite mound. (Let's hope the next discovery is not in the middle of that country's designated wildlife sanctuaries!).

When the queen dies, the nest is abandoned and the squatters move in—a whole array of them, ranging from aardvark to warthog, hyena to mongoose, and porcupine to rock monitors. In my long history of safaris I can attest to having seen quite a bit of activity in, around and on top of these mounds.

Mounds do not only serve as underground shelters. They are also lookout posts for both prey and predators. While leopards and lions spend time on these elevations to look for prey, impala, kudu, baboons and birds use it as a sentry post to spot oncoming danger.

By latest estimate termites are costing the southwestern United States alone approximately \$1.5 billion each year in wood structure damage. Termites are also a major pests in East Africa's farmlands.

However, in safari country they are considered responsible, hard-working and constructive denizens, providing nourishment, shelter and safety for the animal kingdom, as well as fertilizer for new growth.

Next time when you are on safari and come across one of these fascinating edifices called termite mounds,



They come in all shapes...

termitaries or ant hills, stop and observe. In the words of Proverbs 6, "go to the ant...consider its ways and be wise!"

Take it from me, you will be mesmerized by what is happening in and around the houses designed and built by the architects of wild Africa.

Termite "garden" with mushrooms



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