

# Black Ant Slave Takers

Several scientists from the University of Pennsylvania are at Latrobe, Pa., studying one of the most curious battles that have ever been waged by insects. It is a fight between two colonies of ants, and has been going on for the last fifteen years in the little cemetery at the St. Vincent monastery, says the Inter-Ocean.

For years the studious monks of St. Vincent have observed the struggle. One of them, Father Jerome, has devoted all his spare time to studying the various battles that have taken place, and he has collected a record which reads like a war between two nations.

Slavery is the issue between these battling insects. In the cemetery proper there is a colony of "slave-taking ants," the boundaries of whose home are definitely marked near the borders of the burial ground. Just over the hill from this is a colony of the common red ants of larger size, and between these two communities, or formicaria, for a decade and a half the battles have been frequent and furious. As a natural consequence the red ants, being constantly depleted of their "neuters," or workers, are becoming less and less numerous, while the black ants, living in luxury and ease, are swarming more powerful in numbers each year. The outcome will probably be that in the end the slave-taking ants will exterminate the red ants, when the former will be compelled to move elsewhere for serfs.

Exhaustive study, under the microscope, has been made of the two colonies and their bellicose relations by Father Jerome and other priests at the monastery. Father Jerome has a wide reputation as an entomologist. Here is what he has learned about the curious battle which has been waged for so many years.

The black ants have constructed, with the help of their serfs, immense galleries in the cemetery, which are constantly being enlarged by the additions of new colonies sent out from the mother house, and the extending of these by increased population.

To begin with, there are three kinds of ants in the black nest—the males, females and the neuters, the latter being undeveloped females. When the males and females emerge from the pupae state both have wings. Unlike the bees, which leave the colonies in swarms because of bad air, overcrowding or other cause, the young ants leave the nest simply for reproductive purposes.

Pairing, the males and females take their honeymoon trip in the air, after which the males die and the females uncouple their wings, nevermore to reclaim them. In this apparently helpless state the females are found by the neuters and either brought back to the home nest or, surrounded by a new colony of neuters, the new queen takes up her abode in a new colony.

In this she at once proceeds to deposit her eggs, in groups of six or eight. When the eggs are hatched the insects are then in the pupa state. This pupa spins a cocoon, which looks like a barleycorn, and which most people quickly mistake for an "egg." In about a year this cocoon hatches into the perfect ant, which suppose for descriptive purposes to be a soldier, for such the colony possesses.

This soldier is a neuter with elongated jaws, made for fierce battle work. The colony finds that the work is becoming too much for the slaves captured in the last raid into the colony of the red ants down the hillside. With their antennae, the soldiers communicate from one to another the intelligence that a forage is to be made. First a few scouts set out. These scouts go a little way, then retrace their steps—why? Because the sense of smell is with the ant its means of following the path taken by its predecessor. This fact has been proven time and time again by crossing the path with the hum-an finger or otherwise interrupting the line of scent, in which case the ants become at fault, and only after scouts have been sent out in all directions by the main body of the army following can the trail be again found and followed.

The scouts, then, are the trail makers. They go ahead of the army in bodies of four or five hundred and cut the trail for the fighters. The material that is severed by the sharp mandibles of the insects is carefully removed by them, and piled alongside the trail. The ants seem to work in shifts, and when one rank is weary it falls back, and others take the vacant place. These trails are four or five inches wide. The main body of the ants follow behind the scouts at least a day's journey in the rear.

When the fornicarium of the red ants is reached the black soldiers rush in. A furious battle ensues.

Many of the red ants are killed in defense of their homes, their lineage, and their defenseless offspring. But the red ants are no match for the slave takers. Here and there, in this gallery and in that, the black ants are busy grabbing up the pupae in their jaws.

Finally, each invader, with a pupae in its mouth, the black ants retrace their steps toward their own colony. The kidnapped pupae are now taken in charge by the nurses and attendants—the "minor" neuters of the black ant colony. The helpless things are fed and cared for till they are perfect insects. By this time probably they have lost all knowledge of their old home, and being thoroughly domiciled as serfs, and knowing nothing better, they are reconciled to serfdom.

The black ants treat their slaves with all kindness, aside from the fact that the latter have the burden of all the work. It is their duty to make new galleries, to attend to the queens, or females, of which, unlike the bees, there may be several in the same hill; to feed the larvae, and to otherwise keep the colony in the best repair.

One of their chief labors is the removal of the larvae from place to place in the nest, which, in fact, seems to be constructed mainly for the protection and growth of these helpless infants. During the night the larvae are placed in the deepest cells of the nest, the entrance to which is secured to keep out marauders. In the morning the diligent neuters take up the larvae in their mouths and convey them to the outer chambers of the fornicarium, where the sun's rays may have access to them. Sometimes the larvae are exposed to the direct light of the sun.

But the handicapped ants are not the only subjects of the black fighters. It is well known that ants like sweet things. Sugar attracts them, ripe fruit, a crust of bread dipped in molasses, a piece of candy, will usually be found covered with ants if left for a few minutes on the ground. Also naturalists have discovered that ants have learned to know certain little insects called aphides, or aphids, which exude sugar from their bodies.

This ant-cow has a gland, filled with sugar leading into a duct, which the ant touches with his antennae, whereupon a tiny drop issues forth for the "milker." This operation is repeated until the ant is satisfied. But in this connection one prominent feature has been discovered at the monastery. It has long been a disputed point as to whether the ants will take the aphides to their nests or simply go out to them as the ant-cows climb upon plants.

According to the observations made it would seem that so long as the aphides are plentiful about the colony, the black ants do not bother to take them prisoners, but simply locate them upon tender plants and go to them for a sip of the honey-nectar. But just as soon as changes in temperature and other causes bring about a dearth of the aphides the black ants thereupon proceed to corner the market in cows and treat those taken prisoners with care, in order to prolong a supply of drinks.

It is only a matter of time before the red ant colony will have been exterminated by the blacks. Then the soldiers will be obliged to move. In doing this they send the scouts ahead to build roads for them, and keep traveling until they encounter another red ant colony.

### The Deacon Was Side Tracked

The editor of a rural newspaper was in Philadelphia during the week following the shooting of President McKinley, and noted with surprise the promptness of the newspapers there to bulletin-board the hourly reports of the president's condition. He determined to adopt the idea on all important events when he should return home. Soon afterwards, he was told one morning by the local physician that Deacon Jones was seriously ill. The deacon was a man of some distinction in the community; so the editor posted a series of bulletins as follows: 10 a.m.—Deacon Jones no better. 11 a.m.—Deacon Jones has relapse. 12:30 p.m.—Deacon Jones weaker. Pulse failing. 1 p.m.—Deacon Jones has slight rally. 2:15 p.m.—Deacon Jones' family has been summoned. 3:10 p.m.—Deacon Jones has died and gone to heaven. Later in the afternoon a traveling salesman happened by, stopped to read the bulletins, and going to the bulletin board, made another report concerning the deceased. 4:10 p.m.—Great excitement in heaven. Deacon Jones has not yet arrived.

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### An Ancient Oxford Inn

All roads lead to London here, and in Paris I was unable to convince anybody that it would be possible to go from Southampton to Oxford without going to London. As that would be traveling along two sides of a triangle where the remaining side should suffice, I only took tickets from Paris to Southampton. At the latter place I had no trouble whatever. All that was necessary was to travel an hour and a half by one train, wait forty minutes for another, travel another hour and a half and there was Oxford; but I still suspect that I could have done it on a bicycle, direct, in less time.

I am beginning to get used to these old hotels, so when the bus dropped us in the courtyard of a quaint-looking old place that looked like the back drop of an old English melodrama, I was prepared for almost anything. What we really got, however, was not much of anything. The food was good, I must confess, and the beds comfortable, but there was no way to have a fire—which we needed sadly—in the room, and there was no other light than candles. I did not think of running water and elevators at the time, but to the best of my recollection they, too, were lacking.

The neatly printed card which was handed to me on my arrival, showing the rates of the inn, asserted that the building had been erected "within a few years of the Norman conquest" (1066), and that it had been an inn since 1525, at least. Between then and now all sorts of nobles and notables had lived and died there, and numerous events of more or less political importance had taken place within its walls. One paragraph among these "Historical Notes" read:

"The martyr bishops, Ridley and Latimer, slept here in 1555; also Archbishop Grammer, in 1556, and the room is known as the Martyr's Bedroom to this day."

All this was interesting, of course, but it didn't impress me much until, just before going to bed, I happened to pick up a small book that was lying on the table in my room. It was a copy of "The Royal Invitation," by Frances Ridley Havergal, and on the fly leaf was written:

"In the name of our king, the Lord Jesus Christ and  
In grateful remembrance of Frances Ridley Havergal's helpful writings, in the room made holy by the last night on earth by her forefather, the martyr Ridley—  
"Please leave in Room 10, Golden Cross Inn, for a blessing to other wayfarers."

I took some minutes for this information to soak in and for me to realize what it meant, but finally it dawned on me—I was occupying the martyr's bedroom!

I have since moved into less expensive quarters, which are more comfortable, and are not so overshadowed by the oppressive gloom of history. The next day I saw the monument erected to the memory of these martyr bishops, "who, near this spot, yielded their bodies to be burned," according to the inscription.—Wood Lavette Wilson in Indianapolis News.

### Came to Abrupt End

Hartford, Aug. 2.—The greatest event in the history of light harness racing, the \$50,000 match race between E. E. Smathers' bay gelding Lord Derby and Thomas W. Lawson's chestnut gelding Boralma, was brought to an abrupt end after the third heat at Charter Oak Park today because of an accident to Boralma in scoring. The Boston horse gashed the quarter of his right foreleg badly and was unable to start in the fourth heat. This course was advised by Dr. Lee, a Boston veterinarian, and the owner consented. Boralma had won the first heat and Derby the next two and the New York horse was then sent over the course in a jog and was declared the winner of the big purse.

From a spectacular point the contest was hardly a grand one. The respective heats were won in rather easy fashion, without a semblance of a fighting finish at the wire. The horses, however, were warming up to their work and the crowd of 50,000 expected to see the qualities of the grand horses tested in the heats that were to follow. Lord Derby was a favorite from the pools and even after Boralma's win in the first heat the odds changed only slightly. Boralma traveled along in the first heat and looked to be in better condition than Lord Derby, but Smathers' horse then settled down and showed his true form.

Millionaire Lawson was not present his interests being looked after by John Roache. Mr. Smathers was present and occupied a box with his party.

After scoring twice the horses got away even, Boralma soon taking the lead. He led to the half and the three-quarters, and Gers then sent Derby out to show his speed. The

little gelding, however, broke badly on entering the stretch and swerved over to the fence. Boralma finished easily in the lead by about two lengths.

This changed the betting from 50 to 30 to 38, with Lord Derby still favorite. The horses scored three times in the second heat before they got the worst. Boralma kept a two lengths lead at the quarter and half, but Derby then pulled up and caught him in the home stretch. About 200 yards from the wire Gers pushed his horse to the front, Boralma breaking slightly. Derby then eased up and won by a little over a length. Time, 2:09 1/4.

The straight heats were 50 to 15 on Derby when the horses appeared for the third heat, with little Boston money in sight. An even start was obtained and Derby opened up a length at the quarter. Boralma closed up the gap on the back stretch but at the three-quarter pole Derby drew away and Boralma went up in the air. It looked like a shut-out for Lawson's horse as the racers tore down the stretch, but Gers seemed to hold Derby back and won by only a length in a jogging finish.

Smathers was heard to remark that this was poor judgment to jog along with so much money involved. The mile was a slow one, 2:18 1/2 being hung up.

Soon after a doctor was called to attend to Boralma's injured leg and later the horse had to be drawn. The cut extended to the bone and the wound bled profusely. Dr. Lee, who has charge of Lawson's stables, said tonight that Boralma's injury will prevent his racing again this year.

For suits and trousers see Brewitt's new fall goods.

### \$50 Reward.

Stolen Sunday, June 8th, one male dog, very dark grey, white breast, light chops, light grey stripe running from point of nose up between eyes, front legs white, hind feet white, extreme tip of tail white, belly light color, always carries tail curled over back or left side, nose very small like a fox or coon. I will pay the above reward for any information that will lead to the arrest and conviction of the thief and recovery of dog.

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