

## HOW MUCH DO ANIMALS KNOW.

By Theodore Wood, F.R.S.

"How much do animals know?" The question is not an easy one to answer, and very different replies are given. On the one hand we have the physiologist, who asserts that animals are nothing more than live automata, with neither reasoning faculties nor true power of perception; and on the other hand we have the writer of zoological romance, who endows his favorite beasts and birds with every human thought and feeling and emotion. Probably the truth lies somewhere between the two extremes.

At any rate, animals can think for one another, and plan for one another, and converse with one another. A cat of my own disappeared once for exactly a week. At the end of that time I saw him returning, in excellent condition, along the tops of the walls of the neighboring gardens.

He jumped down, went up to his mother, who was lying asleep in the sun, and woke her. For two or three minutes the pair appeared to be engaged in earnest conversation. The son then jumped back on to the wall, the mother followed him, and the two disappeared for another week, after which they returned as sleek and as fat as if they had been living entirely upon cream. Where they went I do not know to this day. But it is quite clear that the son hit upon some land of milk and the feline equivalent of honey, enjoyed its pleasures for a time, wished his mother to enjoy them too, and then went home in order to fetch her. And undoubtedly he had told her why he had come. Here, at any rate, we have thought and consideration, and the interchange of knowledge and ideas.

My present cat—a blue Persian—has his supper at 9 o'clock. He then goes to the door, with the utmost regularity, and requests to be let out in order that he may return to his haunts in the garden. Being a delicate animal, his petition is as invariably refused; and after a remonstrance or two he retires to an armchair and proceeds to make himself comfortable. The moment that the postman's knock is heard, however, he returns to the door, for he knows perfectly well that the maid will bring up the letters, and that it will be opened, so that he can slip out. Here we have memory and the association of ideas. A postman's knock is followed in unvarying sequence by an open study door, with a chance at any rate of an illicit return to the garden.

I have the record of a case, too, in which a retriever dog was seen to be busily collecting mouthfuls of hay and carrying them to one particular spot in a field. On investigation it proved that he was laying the hay on a hedgehog, which was lying coiled up on the ground. Having covered it up carefully, he picked it up in his mouth, hay and all, and trotted away with it, the hay being evidently intended to protect his jaws from its spine. No amount of inherited instinct will explain behavior such as this. It was a clear case of reason.

Cats and dogs are domesticated animals of course. Their mental faculties have been developed, presumably, by association with mankind through many succeeding generations. Therefore they are probably more intelligent than their wild relations. But wild animals often manifest intellectual powers of a somewhat high order. Six wolves, for instance, were seen in India by Colonel W. Campbell combining in an attack upon some antelopes which were feeding together in the middle of a large field. After an obvious colloquy, lasting for several minutes, one of the wolves remained where he was and a second made his way cautiously to a furrow near the spot where the antelopes were feeding, while the others crept along with equal caution, each to a different corner of the field.

As soon as they had taken up their position wolf No. 1 dashed at the antelopes, which immediately scampered away in the opposite direction, only to be headed off by one of the wolves which were lying in wait. This happened again and again, the different wolves springing up one after another as often as the terrified antelopes changed the direction of their flight. And by degrees they were driven back toward the furrow in which the sixth wolf was lying concealed in readiness to tear one of them to the ground as they passed by. Here we have a combined scheme of action, carefully thought out and arranged beforehand. It is almost impossible not to regret that Colonel Campbell prevented it from being carried to a conclusion by shooting one of the wolves.

An amusing instance of sagacity was recently recorded of a skua. The bird in question, somehow became aware that a nest hunter was searching for its eggs. It therefore left the little hollow in which they were lying, hurried up to a sitting gull, drove it away, and settled down in its place. Every now and then it raised its head cautiously, as though looking out for danger, and then crouched down again upon the eggs of the gull. At last, as the nest-hunter drew near, it flew away with a terrified squall. Evidently the bird knew that he was hunting for its eggs, but concluded that he would not know those of a gull from its own, and concocted its little stratagem accordingly. You cannot call this anything else but reason.

And, personally, I find it hard to attribute behavior of the thornback crab to instinct. That quaint crustacean, as every naturalist knows, is accustomed to disguise itself by planting seaweeds or sponges all over its back, carefully arranging them in position and pressing their roots or suckers firmly down with its great claws, until they are held in place by the tiny hooks with which the surface of the carapace is covered. This practice, of course, may be purely instinctive. But what are we to say of the fact that if you take one of these crabs, whose back is covered with seaweeds, and place it in a tank of sea water, the bottom of which is covered with sponges, it will invariably strip off the seaweeds and replace them by sponges?

It is difficult to avoid the conclusion that the animal realizes that it is not so well concealed as it could wish, and discovers not only reason, but the remedy—in other words, that even a crab can think.

## AUTUMN.

By W. M. Mackerächer, M.A.

The Year, an aged, holy priest,  
In gorgeous vestments clad,  
Now celebrates the solemn feast  
Of Autumn, sweet and sad.

The Sun, a contrite thrifter  
After his graish days,  
Through lessening arch, a wavy blur,  
His burnish'd censor sways.

The Earth—an altar all afire  
What hecatombs to claim!  
Shoots upward many a golden spire  
And crimson tongue of flame.

Like Jethro's shepherd when he turn'd  
In Midian's land to view  
The bush that unconsuming burn'd,  
I pause—and worship too.

If a strenuous soul be sad, so much the worse for him and his cause. He is trying to shoulder more of the universe than one man can carry. Let us trust God, and fight in the strain we may find our mouth filling with his gifts of laughter. Loneliness, moroseness, discontent, impatience, anxiety—leave them for the unreligious.

## RESTLESS BABIES.

If your little one is restless and cross it is more than likely the trouble is due to some derangement of the stomach or bowels, and if Baby's Own Tablets is given the child will soon be bright and cheerful, and when the mother gives her child this medicine she has the guarantee of the government analyst that it contains no opiate or poisonous drug. Mrs. J. F. Loney, Allanford, Ont., says:—"I have used Baby's Own Tablets for constipation and other ailments of children and have found them more satisfactory than any other form of medicine." Sold by medicine dealers or by mail at 25c a box from The Dr. Williams Medicine Co., Brockville, Ont.

## LITTLE I-DON'T-LIKE-YOU.

"I don't like you! I don't like you!" It was a little bit of a girl who saug out these naughty words and pouted her lips and frowned.

"I don't like you neither, then," said Joe, getting cross.

"And I don't like you, missy," said Frank.

"Peoples who come visitin' ought to be polite," said Mary Sue.

"I don't like you! I don't like you! I don't like you!" And the little bit of a girl frowned at each of her small cousins.

The little bit of a girl's name was Anna, and she had just begun to be cross. For a whole week she had been a dear child, so gentle that her Aunt Sophie called her Pussy.

"I don't like you." She was frowning at Aunt Sophie, and Joe and Frank and Mary Sue felt very much ashamed, for Aunt Sophie was a visitor, too.

"I-Don't-like-You!" questioned Aunt Sophie. "Oh, is that your name? I thought it was Anna!"

Now, the naughty little girl fully had expected Aunt Sophie to say, "Oh, you must like me, Pussy!" She loved to be called Pussy. But when Aunt Sophie gave her another look, she cried out again, "I don't like you!"

"If whenever I look at that little nephew he would cry out, 'Joe!' I would know for sure and certain that his name is Joe, which it is. If whenever I look at this little nephew he would scream, 'Frank!' then I would know his name is Frank; and so with Mary Sue. Therefore, sure and certain, we have here Little I-Don't-Like-You."

"It isn't a Christian name, is it?" asked Joe.

"Cause Christians like people," said Frank.

"She must be an old Chinaman," declared Mary Sue.

"Little I-Don't-Like-You," said Aunt Sophie, "didn't I hear you calling your name to a man in the public road? Is it true that you have told it to the cook?"

"I'm afraid she screamed it to the ice-man," said Joe.

"Then it is all around the place," said Aunt Sophie. "I am very sorry, for it is not a pretty name; not near as pretty as Pussy."

"I-Don't-Like-You is an old Chinaman, so she is," sobbed the little bit of a girl; "I-I-I'm Pussy now."

Aunt Sophie sat down on the porch steps, opened her arms, called "Pussy," and something soft and fluffy was in them.

"I wish that Joe and Frank and Mary Sue would tell the cook and the ice-man and everybody that I do like peoples," said the little bit of a girl, wiping her eyes.

"Cause you feel better when you like peoples, don't you?" asked Mary Sue. Then Joe and Frank as well as Mary Sue promised to tell the cook and the ice-man and everybody what Pussy said, and after that there was never again a little I-Don't-Like-You around disturbing the peace.—Selected.