



Cats

► IF cats grew to the size of dogs it seems highly likely that man would never have enticed them into domestication. For cats have never completely taken to civilization. Everyone who ever owned a cat has felt at times the vague stirrings of fear that he has a wild creature on his hands.

Just how the house cat descended from the ferocious wild cats which it so closely resembles is not at all clear. House cats are related to lions, tigers, leopards, pumas, jaguars, and wildcats, as a trip to the zoo clearly demonstrates.

Cats, large and small, wild and domestic, belong to the meat-eating, hunting animals. They are characterized by fine fur, long smooth tails, blunt snouts, and retractable claws. They move with a sinuous suppleness unsurpassed in the animal kingdom except possibly by the unique locomotion of snakes, although both cat fanciers and snake lovers will dispute the comparison.

Even the most pampered of house tabbies retains a strong strain of jungle wildness. Although it rarely is expressed against humans, the cat's ferocity is on ready tap if any of its natural enemies appear on the scene. Dogs, mice, and birds quickly convert the purring pet into a grim hunter.

Many people have tried to keep both cats and canaries. The experiment may last for a greater or lesser time, but it usually ends

some dark night when the family is away. The cat bides his time, and when prying human eyes are withdrawn the cat will do its utmost to make a meal of the canary.

It is thought that cats originated in Africa, and then made their way through Europe and Asia into the Western Hemisphere. Just where along the line the small cat was domesticated is not known. There are several species of small cats which have been more or less tamed into household pets.

There is our own *Felis domestica*, the domestic cat. Siamese cats are a distinct species, although they have all the same qualities of personality and manner of our common cat. The jungle cat of Africa and tropical Asia is not so good for domestication. Although small compared to lions and tigers, this animal is about twice the size of the ordinary cat.

Native American cats include cougar, jaguar, ocelot, lynx and bobcat. A very early, but now extinct, predecessor of these cats was the large and fierce sabretooth tiger which stabbed its victims to death with the large fang-like teeth curving downward from its upper jaw.

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PSYCHOLOGY

Test Shows Whether Child Has Musical Ability

► WHETHER it is worth spending money on music lessons for a child or whether it is a waste of effort and money, can be told by a new test developed.

Try these chords on your piano: first F, A, and D, then E, A, and C sharp. If your child can tell you which of the two chords is lower, he may be a budding Bach. If he cannot, he probably will profit more from playing baseball after school than from practicing on the piano. Chord comparison is one device used in the new test of musical talent.

The test was developed by Dr. Louis P. Thorpe, University of Southern California psychologist, and Dr. Harvey S. Whistler of Rubank, Inc., Music Publishers, Chicago.

You may think there is only one kind of musical talent—either you've got it or you haven't. It's not so. According to the authors of the test there are four kinds: being able to tell tunes apart, being able to tell notes apart, being able to tell rhythms apart, and being able to tell how many times the same note is played in a tune.

A child may have musical talent in all four of these, some or none, and his intelligence has practically nothing to do with it.

A scientific genius may be a musical moron. It is true that a mental giant can memorize a piece more quickly than can a less intelligent person, but no amount of note learning can help him carry a tune if he is tone deaf.

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ORNITHOLOGY

Young Hummingbirds Are Considerate of Parents

► THE hummingbird, smallest of warm-blooded animals, is an even more remarkable creature than has been generally known according to the first studies that have ever been made of this winged whirlwind's metabolism (energy interchanges) while in flight.

Hummingbirds have the highest metabolic rate for any resting organism, their metabolic range is greater than that of any other warm-blooded animal, and they have the ability to become almost completely torpid at night to conserve energy.

Further, the hummingbird young are quite considerate of their parents. In relation to size, an adult bird's food requirements are enormous, as a result of his huge expenditure of energy. He has a hard enough time getting enough food, all of which must be gathered during furious flight. The young, who weigh about as much as the adults (3 grams, about as much as a dime), maintain a very low metabolic rate and food requirement in order to reduce the burden of food-gathering placed on the parents.

These are some of the findings of Dr. Oliver P. Pearson, assistant curator of mammals at the Museum of Vertebrate Zoology at the University of California. Dr. Pearson was able to make measurements of the bird's metabolism in flight because of the ability of the bird to fly in a bell jar. An apparatus connected to the jar recorded the oxygen consumption of the bird, and this was a measure of metabolism.

Dr. Pearson found that the hummingbird's oxygen consumption is about 13 cubic centimeters per gram of body weight during the daytime. The average man consumes about 16 quarts per hour, but his metabolic rate is much lower. If his metabolic rate equalled the bird's, he would consume about 1,060 quarts per hour.

The scientist found that the bird's metabolic rate in flight was about six times that at rest. During his apparently voluntary evening torpor, the hummingbird loses all power of movement or feeling. In the morning he comes to life, as though from the dead, by some mechanism not understood.

Dr. Pearson also calculated that the cruising radius of the bird is about 385 miles. This bears on a question of dispute among bird experts, who disagree as to whether migrating hummingbirds can fly non-stop across the Gulf of Mexico or follow the land around it. The Gulf is more than 500 miles across. The radius of flight was calculated from metabolic rate, average speed in flight (50 miles per hour) and amount of fuel they carry (one gram of fat).

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