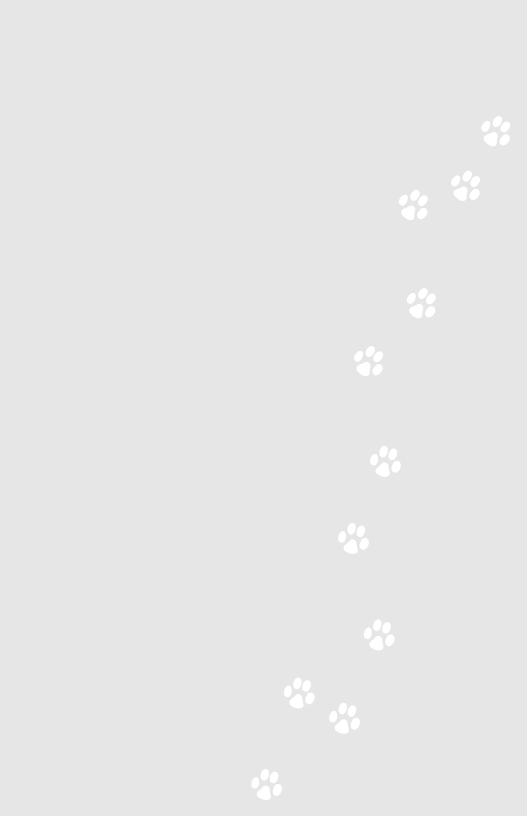


How They Behave, and Why







The Habits We Like

The purr-fect sound of contentment

To a cat lover, it is one of the most pleasant sensations in the world: the contented vibration that we know as purring. Why do they do it? Scientists think it is a kind of "homing device" used by a mother cat to help her newborn kittens (whose sight, hearing and sense of smell are all underdeveloped) locate her when it's time to nurse. Purring is a kind of "dinner bell" to young kittens. A mother cat purrs, the kittens fasten on, and the purring stops. We can't be sure, but it appears that from kittenhood on they associate purring with pleasure.

2 Share the purr

Your contented cat may purr in your lap or lying near you, but you won't hear (or feel) him purr as he lies contented in the sun. Purring is never a solitary act; cats only purr in the close proximity of a human—or another cat. Cat experts think purring indicates not

only contentment but also submission. That is, purring is the kitten's signal to his mother and the adult cat's signal to his owner that "I'm yours." No wonder owners take such pleasure in it.

They knead you

Kneading refers to a cat's habit of using its front paws to massage a person's chest or stomach. It goes back to kittenhood, when a nursing kitten uses its tiny paws to massage its mother's udder while sucking. Kneading is inevitably accompanied by purring, and both adults and kittens are clearly in cat heaven while kneading. Some cat owners love this evidence that cats can pet their owners as well as *be* petted. On the other hand, kneading can be downright painful to people, because a cat's claws are definitely *out* while kneading. Owners of declawed cats (including the author) find kneading to be a perfectly painless and delightful aspect of cat ownership.

4 There's a name for it: "bunting"

There's a fabric called "bunting," and you can "bunt" a baseball. Likewise, your cat will "bunt" you and your furniture as part of a familiar habit: rubbing the side of his head against a person or an object. This isn't just affection; the cat is actually leaving behind some glandular secretions from his face as a kind of "I was here" signal to himself and other cats. We can be thankful that this form of

scent marking is practiced on us instead of the much more obnoxious spraying of urine.

Mad dashes

It amuses us as much as it mystifies us: for no apparent reason a cat suddenly makes a mad dash through the house. Many cat owners claim cats do so after using the litter box, perhaps to express a sense of relief and release. Conversely, some do it right after eating. But often the cat's mad dash is connected to no other event. Experts in animal behavior suggest that running fits might relieve tension, but tension doesn't seem to be much of a problem for many cats. Perhaps the best and most satisfying explanation is that it just feels really good to run and frolic, even if it's just for a few seconds.

6 The "I see you" call

Cats vary greatly in their "talkativeness," but most of them will give an "acknowledgment" call to people with whom they are familiar. This is a very short, soft "meow" uttered when, for example, you walk through a room where the cat is sitting. The acknowledgment call isn't urgent or pleading, and you won't hear it if you've just walked into the house after being gone for two weeks. Cat owners find it to be a pleasant part of owning a cat, for it seems to be the cat's way of communicating, "Yes, I see you," rather than ignoring the person.

Allogrooming and autogrooming

Yes, we all know that cats are fanatical groomers (that is, lickers) of themselves, but every cat owner also knows that a cat will also groom his owner, and other cats as well. Naturally there are technical terms to employ here: *autogrooming* refers (of course) to the cat's grooming of himself, while *allogrooming* refers to licking other cats or humans. The cat spends less time and attention on you than on himself for the obvious reason: he assumes (correctly or not) that you are responsible for keeping yourself clean.

🎖 So much primp time

If a human spent one-third of his waking hours on grooming, you would call that person vain and self-obsessed (unless the person was you, of course). But it is estimated that cats do indeed spend about one-third of their waking hours in grooming, and no cat owner would argue with that.

Govering their traces

The fact that cats use their litter boxes (usually) is one of their finer traits. Owners assume that covering up their wastes is another sign of cats' fabled cleanliness. It is, in part, but it's also part of their wild genes: by covering up their traces they are acting in the role of wild animals who do not want to leave anything behind that will lead to their being trailed.

10 High as a cat

If you've ever given your cat the herb known as catnip, you know how much pleasure it gives. The cat rubs his face in it, licks it, then stretches, rolls around on the floor and in general gives the impression of being in extreme ecstasy. If you've ever seen a female cat in heat, you know that a "catnip high" appears very similar to a "heat high." However, these two highs aren't quite the same; plus, male cats respond to catnip exactly as females do. Catnip is available in stores everywhere, and lots of people grow their own. As with drugs and alcohol for humans, catnip can lose its zip if given too often to your cat.

The urine-catnip common bond

To the human nose, catnip has only a faint smell, but obviously cats respond to it in a flamboyant way. Curiously, cats can also get a high by sniffing a concentrated extract of tomcat urine, which humans respond to in quite a different way. It appears that the chemical compound nepetalactone, which is the pleasure-inducing ingredient in catnip, is similar to something found in tomcat urine. (Here's a hint: If you want to please your cat—and yourself—stick with catnip and avoid the urine extract.)

12 Privacy, please

Dogs are notoriously "public" animals, perfectly willing to urinate and defecate in a busy area with lots of people observing. Cats are more reserved, and while they don't object to being watched, they do object to having their litter box placed in a high-traffic area. One way they show their displeasure with this situation is that they cease to use the box and find their own spot somewhere else in the home. A litter box, to satisfy both the cat and the owner, ought to be in a quiet, low-traffic zone in the home.

13 Love your smell

Whether cats can truly love in the human sense has been endlessly debated. Those of us who truly love cats look at it this way: they probably love as much as they are capable, which is all we can expect of any being. At any rate, they do seem fond of the smell of those they know well, which explains why a cat can be found sleeping on something that has your smell on it—not only the bed, but a sock, shirt, sweater, etc. Some, in fact, like sleeping on a pile of the owner's dirty laundry. You might not be aware of your distinctive scent on the object, but your pet certainly is.

14 The "leave no traces" phenomenon

Dogs are lovable but klutzy, and a dog doesn't give a thought to what he might be knocking over with a wagging tail. Not so the cat. Your cat may occasionally knock over a vase or other household item, but such events are rare because cats are fastidious about not disturbing their environments. (This doesn't apply to prey or potential prey, obviously.) A cat walking across a desk, for example, plants his feet carefully, so as to leave things much the way he found them. This is unnecessary behavior for house pets, of course, but it's the instinct of their wild ancestors, always trying to keep themselves hidden from both potential prey and potential aggressors.

15 Mice aren't stupid

It has been estimated that a young healthy cat could easily kill a thousand mice in a year. Most homeowners will be happy to know that their own houses are unlikely to have a thousand mice in a year, or in ten years. So in short, if you do own a cat, you probably won't have mice around, or not for long. Rodents are not stupid, and they will tend to avoid a house where a cat lives. Unlike the cartoons, where the wily mice always get the better of the cat, in real life rodents either get eaten or move on to a catless home.

16 All-natural extermination

Here in the sanitized twenty-first century we like to think that the household woes of bygone days including rodents—no longer bother us. But it isn't so, as proved by the thriving business of pest control companies, plus the huge sales of traps and poisons. Rodents were around before humans were, and though we live in a high-tech world, low-tech rodents are still a serious problem. Homes and businesses too might be wise to "go natural" and fall back on the original pest-control system, cats. In fact, factories and other businesses find that traps and poisons aren't always the best solutions, since rodents can learn to avoid them.

The sound of the sack

Almost all cats are fascinated by the sound of a paper bag, and every cat owner has probably witnessed the familiar scene of bringing home something from the store and watching the cat turn the bag into a toy. The featherweight plastic sacks that have now largely replaced paper bags don't seem to be quite as much fun for cats, but, whether paper or plastic, bags that make some kind of rustling or crackling noise do hold some fascination. (Aside from the sound, bags are fun places to hide in.) For owners who want to keep their pet supplied with a noisy sack at all times, there is the Krinkle Sack, a machine-washable item that provides the right sound and lasts much longer than the usual throwaway store sack.

8 Snow as prey

Kittens do it, and so do some adult cats: swat or bite at falling snowflakes. To a cat, each falling snowflake is a potential toy—or to be more accurate, a potential prey to play with before "killing." Most cats seem to like snow (or at least a few minutes of it), and as long as it isn't too terribly cold an outdoor cat will go about its normal business with snow on the ground. Some find their usual outdoor "latrines" covered with snow, forcing them to go elsewhere temporarily, but some cats will forge right on through snow, insisting on using the same old spot even if it does have an inch of snow over it.

The Habits We Don't Like

19 Ah, the taste of urine

Like many animals, cats use their urine to mark their territory, and this is especially so of unneutered tomcats. The flip side of this habit is that cats habitually sniff about to determine if another cat has urinated in the vicinity. When another cat's urine has been detected by smell, the cat will then lick up the urine, then move the tip of the tongue against the upper palate. Yes, it does sound disgusting, but the reason he does this is that above the hard palate is the vomeronasal organ, a sense organ that (probably) can tell the cat the sex of the cat who produced the urine. Some scientists consider this organ to be the source of a cat's sixth sense.

20 Yes, cats do it too

Dogs are notorious for sniffing each other's rear ends (and, embarrassingly, the rear ends or crotches of human beings also). We'd like to be able to report that cats aren't so crude, but in fact they are, though less showy about it than dogs are. Two cats new to each other will, assuming they don't fight, at some point get around to sniffing each other around the anal region, probably cautiously circling a few times before the actual sniffing takes place. (We can be thankful that some of these behaviors are not practiced by their human owners.)

21 Drinking from the toilet

We associate this habit with dogs, but cats love to do it, too. Why, especially if the cat has a perfectly good water dish available? No one knows for sure, except that we can assume these very independent creatures like to seek out their own watering places, just as they would in the wild. A cat will drink not only from your toilet but from a birdbath, a fish bowl, a gutter or anything else with water in it, and cats aren't fussy about whether the water is fresh or stagnant. The toilet-drinking habit seems disgusting, but remind yourself that your cat would *not* drink from the toilet if it contained anything besides water.

22 Do they know their names?

Dogs certainly do, but do cats? The answer is yes—but whether they choose to come to you when called is another matter. Even the most loving cat still retains his streak of independence. A tip for

teaching the cat his name: call out the name just before you feed him, so that he comes to associate the sound with coming to a full dish. In time he will connect his name not only with the food but also with the act of coming to you.

23 Shedding, molting, whatever

Technically, it's called molting, but owners usually just speak of shedding, and it's one of the less pleasant aspects of cat ownership. Cats living in the wild molt hair in the spring, leaving them with a shorter (and cooler) coat for the summer. But most house cats live in an environment that is artificially lit, heated, and cooled, so your cat is most likely to shed to some extent year round. (An analogy: a cat in the wild is like a deciduous tree, dropping old leaves at one time in the fall, but your house pet is like an evergreen, dropping leaves or needles a few at a time no matter the season.)

24 Love that wool

This isn't as common as other cat problems, but you'll see it occasionally among Burmese and Siamese cats: the cat will chew on cloth, sometimes creating large holes. They seem to prefer wool, which is why vets refer to "wool chewing" and "wool sucking," but some cats will chew on other fabrics as well. No one knows exactly why they do it,

though it might be related to a craving for fiber in the diet. It isn't easily solved, though some people work around it by giving the cat an old wool sock or glove to chew on.

25 Wetting the tires

You may have seen dogs urinating on car tires, but did you know that tomcats do it too? As with dogs, unneutered tomcats who do this are marking their territory (and, like dogs, don't understand that the "marked car" isn't going to stay in one place).

26 The three marking methods

In marking their territories, cats use three methods, one related to sight, the others related to smell. To provide visual evidence of "This is mine!" cats scratch. (And you thought they were just sharpening their claws.) To provide olfactory evidence, they rub objects with their muzzles, leaving glandular secretions that humans can't smell but that are picked up by other cats. And even more noticeable olfactory evidence results from spraying urine—unneutered toms are the worst (and most malodorous) perpetrators.

27 Sampling the vegetation

Cats are carnivores, with no interest in vegetable food, and yet they will occasionally chew on plants. The author has watched his cat roam in the yard, which contains several poisonous plants, including dieffenbachia and allamanda. Happily, his cat has sniffed at these but never bitten into them. In fact, outdoor cats very rarely chew on poisonous plants, but sometimes bored indoor cats do bite into house-plants, and some of the common ones—dieffenbachia and philodendron, for example—are poisonous. While few cats are ever poisoned this way, it might give you peace of mind to ask your vet for a list of poisonous shrubs and houseplants, plus information on emergency treatment.

Discipline, More or Less

28 "Shut up!" just doesn't work

If a cat's meowing is getting on your nerves, here's one thing that won't work: telling him to stop. Cats respond to sound with more sound. By telling a meowing cat, "Stop!" or "Shut up!" you are making sure that the "conversation" continues. The only way to silence him is give him what he wants—food, water, attention or an open door. (On the other hand, if it's a female cat caterwauling because she is in heat, you won't be able to give her what she wants.)

29 Blow equals hiss

Cats really don't like having air blown at them, particularly in their faces. In fact, if your cat is getting too

rough while playing with you, blowing in his face is a good way to get him to back off. Why, since a puff of air is harmless? Apparently cats associate blowing with hissing—their own sign to the world that a serious threat is near. If you are close to a hissing cat, you will experience not only the distinctive sound, but also a jet of air being expelled from the cat. So, when you blow air at your cat, you are (so the cat believes) hissing at him, and he will respond accordingly.

30 The squirt gun technique

Many cat owners swear by the use of water pistols in training cats. Here's how it works: Keep a water pistol filled with water in a convenient place in your home, and when you catch the cat doing something he shouldn't be doing, give him a squirt of water. It seems more effective than physically hitting the cat with your hand, since the cat doesn't seem to associate the squirt of water with you. He only knows that when he does a certain thing—urinate on the rug, bite your heels, claw the drapes—he gets spritzed with water, which he doesn't like. It doesn't work with all cats in every situation, but it is worth a try.

31 The ketone "No"

The Hartz Mountain Corporation is a major marketer of pet products, and one of their products has the catchy brand name No. It is essentially an aerosol spray containing chemical compounds known as ketones. The human nose can barely smell ketones, and we find the smell to be slightly sweet. But to the extremely sensitive snoots of both cats and dogs, ketones are highly offensive. No can be sprayed on furniture, rugs or anything else that an owner wants the pet to avoid. Incidentally, ketones are present in the breath of people who are in the advanced stages of diabetes, which explains why it was observed long ago that cats seem to avoid people who are seriously sick from diabetes.

The Claw Problem

32 The itch to scratch

Why do they scratch furniture and drapes? The main reason seems to be to loosen the dead layers of cells on the claws, but scratching is also a way of marking territory. Cats also learn that it gets their owner's attention (definitely!), and scratching may just be a way of releasing built-up energy. Whatever the reason for it, scratching is one of the least attractive cat habits, and the best solution (other than declawing) is to make a scratching post available to the cat. Some cats use them, others never do, but the best way to ensure that the post gets used is to introduce it while a cat is still a kitten. Also, a kitten that has seen his mother use a scratching post is

likely to use one, too. It's worth noting that a scratching post needs to be in the center of things, not tucked away in a corner, since cats definitely prefer that their "graffiti" be easily seen.

33 To de-, or not to de-?

Many cat owners have strong opinions about the subject of declawing. For people who love their cats but who want to preserve their upholstery, drapes, and the like, declawing seems like the ideal solution to the age-old problem of clawing. You take your cat to the vet, and when you bring him home in a couple of days, no more shredded furniture. The cat never understands that he is missing his claws, and owners get a kick out of seeing the pet go through the motions of clawing a chair or drape when in fact no damage is being done.

$34\dots$ and the other side of de-

Opponents of declawing state an obvious fact: if a declawed cat gets loose and is confronted with a dog (or a cat who *has* claws), he is practically defenseless. Vets who declaw cats strongly recommend to owners that the cats never be allowed to roam outside, since the outside world is an especially dangerous place for a declawed animal. Owning a declawed cat does require some extra care and caution, but most people who choose declawing claim it is more than compensated for by the absence of shredded furniture.

Incidentally, many vets refuse to perform declawing on the *back* paws. Cats use their back claws to scratch themselves, and those back claws can help the cat climb a tree if he is being pursued by another animal.

35 Surefooted as a goat—or cat

"Surefooted as a goat" is an old cliché, but "surefooted as a cat" would be just as accurate, for cats have an extraordinary sense of balance, enabling them to walk on narrow ledges, tree branches, and so on. (They have an obvious advantage over goats: claws to help steady themselves.) As it is in humans, balance is connected to the inner ear. The cat's inner ear has an organ called the vestibular apparatus, which, working in conjunction with the eyes, gives the cat a perfect sense of his location in space. With the smallest movement, he will act reflexively to balance himself once again.

36 The belly problem

Almost every cat owner has experienced this: your cat is lying in your lap or beside you, you try to rub his belly, and he begins clawing you vigorously with his back feet. (And yes, sometimes it hurts—and bleeds.) Don't blame the cat. Nature (meaning instinct) has taken hold, and the cat is protecting his most vulnerable spot, his belly. A cat has to *learn* to

relax enough to let his belly be rubbed, and even in the most trusting of lap cats, the old instinct still tends to kick in (literally). Consider yourself lucky if your pet is so secure with you that you can stroke his belly with impunity.

37 Bite, scratch—then lick

Here's another familiar situation of instinct kicking in: you are stroking your cat with your hand, he seems to be enjoying it thoroughly, then suddenly he bites or scratches that hand—then stops and licks the same hand he just bit. Is your cat confused? In a way, yes. A cat has to *learn* to let a human being stroke him, for the natural instinct would be to regard stroking as threatening. Nature programs the cat to bite or scratch the hand, then run. So instinct goes head to head with the learned behavior of relaxing under a human touch. When a cat bites or scratches and then licks your hand, he is very suddenly doing a switch from instinct-led wild-cat to taught-to-be-relaxed-while-touched house cat.

38 Call the fire department!

It's an old cliché, but like most clichés, it's based on truth: cats easily climb *up* a tree but often can't climb *down*. Hence we have all the old jokes about calling the fire department to get the pitifully meowing cat down from the tree. Why can't they climb

down by themselves? After all, squirrels do it with ease. The problem with climbing down is that cats, like squirrels, want to do it headfirst, in order to see what's ahead of it. But while a squirrel's claws are perfect for moving headfirst down a tree trunk, a cat's aren't. The cat wants to go down headfirst, senses he can't, so stays where he is, and makes a lot of noise until rescued.

The Gold Standard of Independence

39 Lone wolf cats

"Lone wolf" is actually a misnomer, because wolves are social animals that live in packs. Ditto for dogs, which are descended from wolves. But cats, of course, are basically solitary animals, and this is true not only of house cats but of all wild cats as well. The one notable exception: lions, which live in groups known as prides. For all other cats, single is the name of the game, and male and female come together strictly for mating.

40 Harness, not collars

Cats and collars go together, but not cats, collars, and leashes. Unlike dogs, cats simply can't accept the notion of being led on a leash, and tugging on a

leash attached to a collar is (in the cat's view) like hanging him in a noose. If you have any hope of ever getting a cat to walk on a leash (and many cats never will), the only hope is the use of a harness, not a collar. A good flexible harness fits around the cat's front legs and torso and, when snapped to a leash, is much less threatening than a leash fastened to a collar.

41 Too dumb, or just indifferent?

"Cats never learn their own name." Ah, but they do, especially if it is short (only one or two syllables) and you repeat it often. What frustrates many people is that a cat will not come to you just because you call his name. He might, or he might remain totally indifferent to you, coming out only when he chooses. Unpredictability and stupidity are not the same thing. The fact is, if you want an animal that will come to you every time you call, you would do better with a dog than a cat.

42 The W. C. Fields syndrome

"Cats hate kids." That's about as true as the statement "W. C. Fields hated kids." He didn't—but he despised *obnoxious* ones. Cats don't like noise or unpredictability, and both seem to accompany children. But cats will happily allow themselves to be stroked and handled by quieter kids, and will gladly

play with a person dangling a string, whatever the person's age. If you have children in the home and there is a lot of noise and confusion, owning a cat isn't impossible, but the poor cat may wish he were somewhere else.

43 "Enough play already"

A dog, especially a young one, will romp and play with an owner as long as the owner's energy holds out. Not so the cat. The cat's energy seems to come in short bursts, and after a few minutes of tearing around the house, chasing a toy or whatever, something inside the cat whispers, "Playtime's over, let's nap!" The cat who has reached his "play limit" may start moving his tail in agitation, signaling to his owner, "Give me some space, OK?" A cat simply is not a "party animal," for his inner batteries have a short life and need to be recharged often with withdrawal and sleep.

Some Truly Mysterious Senses

44 ESP looks suspicious

Cats are mysterious, which fascinates cat lovers but puzzles (and sometimes angers) everyone else. Cats may stare intently at nothing, make mad dashes through the house for no apparent reason or otherwise appear to be responding to some unseen phenomenon. The fact is, a cat is not responding to "nothing," but to something he can see, hear or smell, something that our human senses are not attuned to. No extrasensory perception (ESP) is involved, merely more-sensitive-than-human perception, which also figures into cats' mysterious sensing of earthquakes coming (see 46). In a prescientific age, a lot of people tended to assume that an animal with such mysterious behavior and powers was in cahoots with Satan and the powers of evil.

45 Psi-trailing

You may have seen one of the movie versions of *The* Incredible Journey, about the cat and two dogs who somehow manage to track down their owners hundreds of miles away. Truth is as amazing as fiction, and there are numerous stories of cats locating their owners far away—or, conversely, finding their way back home after being displaced. The stories are legion: a man who moved from New York to California gave his cat to friends in New York before moving—and, five months later, the cat showed up at his home in California. Scientists refer to the ability as psi-trailing, and they are as amazed as we laymen are at cats' ability to find their way around, since apparently they do not rely on sights and sounds as humans would. (Let's also admit that many humans seem to possess an uncanny sense of direction.)

46 Cat seismologists

Seismologists are scientists who use many sophisticated instruments to study and try to predict earthquakes. It appears that their instruments are not quite as sophisticated as cats, for there are numerous stories of cats acting frantically and agitatedly shortly before an earthquake occurred. As the story goes, in China in 1975 seismologists ordered the evacuation of the city of Haicheng based on their observations of cats. The city was evacuated, and the quake hit within a day. The damage was enormous, of course, but because of the evacuation, many lives were saved. How did the cats "know" a quake was coming? We can only assume they are more sensitive to earth vibrations than are humans—or human technology.

47 Napoleon the weathercat

Let's face it: in spite of all the technological advances in weather forecasting, your local weather person isn't always right. That was even more true a generation ago, pre-Doppler. In the 1930s, a woman in Baltimore found that her cat, Napoleon, was a better predictor than the local forecasters. The woman noted that the cat would lie on the floor with his head tucked between his extended front legs as a sign that rain was coming. He did so in 1930 at a time when the local forecasters were sure of an extended drought. Napoleon proved to be

correct, and he so dazzled the locals that his "fore-casts" were made public until his death in 1936.

48 Tornado predictors?

Those of us who have lived through tornadoes know that they are the most unpredictable weather phenomenon, and professional meteorologists would agree. Unlike hurricanes, tornadoes are "sneak attacks," appearing suddenly, lifting and touching down with no rhyme or reason. So how is it possible that cats sometimes seem to know a tornado is coming? There are several stories about mother cats moving their kittens out of a house or barn hours or even days before a tornado destroyed the site. Sheer coincidence, or do cats have a "storm sensor" that we humans do not possess?

49 Air raid predictors

England, and London in particular, had to endure a lot of German bombs during World War II, so Londoners grew accustomed to the sirens that warned of an imminent bombing. Some Londoners still recall that their cats would become frantic and seek out a hiding place—before the sirens even sounded. How did they know? Vibrations in the air that humans—and human radar—could not sense?

Such Sleepy Creatures

50 City vs. country

Scientifically, all house cats are grouped into a single species, *Felis catus*, but aside from the many differences among the breeds, there are also behavioral differences based on location. Curiously, some of these location-based differences correspond to differences among humans. For example, it's an old stereotype (and a true one) that country folk are more likely to "live by the sun," being active during the day and sleeping at night, while urban dwellers are more likely to stay up late and, at times, "party till dawn." This seems also to be true of cats. Farm cats do most of their sleeping at night and most of their hunting, feeding and grooming during the day, whereas city cats are most active from dusk until dawn.

51 Say "crepuscular"

Most people assume that cats are night creatures, and certainly their amazing eyes (see 99) make them suited for night activity. But the fact is, although your cat might be active at night, he is not active *all* night, and in the *middle* of the night he is as likely to be asleep as you are. No matter how domesticated your cat is, he retains hunter genes, which tell the cat that the best hunting time is around dusk and dawn. Cats are crepuscular—most

active at twilight—and least active in the middle of either day or night.

52 To sleep, perchance to dream

Dog owners know that dogs dream, as evidenced by their occasional twitching and whimpering while asleep. Do cats dream? Most definitely. During deep sleep, a cat's eyes move rapidly at times, even though the eyelids are shut. The scientists refer to this as "rapid eye movement," or REM, and deep sleep is often called REM sleep. While in REM sleep, cats may move their paws and claws, twitch their whiskers, change their posture and make sounds—in short, show that they are responding to something going on inside their heads, not outside.

53 Cat EEGs

Scientists use a sophisticated device called an electroencephalograph (EEG) to monitor the activity of the human brain and the brains of some animals as well. By using the EEG, we've learned a lot about cats' sleep habits, as shown by the wavy line displayed on the EEG. We have learned that a cat typically sleeps lightly for about thirty minutes, and then goes into a deeper sleep, called REM sleep (see 52). Most often, though, cats aren't sleeping deeply. Of their daily dose of about sixteen hours of sleep, probably 70 percent of it is light sleep—the "catnap" that is their trademark.

54 Dead to the world—not!

No matter how deep the sleep, cats are never totally "out of it." Every cat owner knows that even a cat who appears "dead to the world" is very easily awakened, as evidenced by the cat's response to touch, a loud noise or even a smell (such as the odor that wafts from the opening of a can of sardines). No matter how domesticated the cat may seem, he still retains this aspect of the wild animal, ever alert to the presence of a threat.

55 Are you listening to me?

If a person appeared to doze off in your presence, you could feel fairly certainly he wasn't too interested in what you were saying. What would be rude in a human being isn't at all rude in a cat, however. A cat settling in your lap or nearby who half-closes his eyes isn't showing a lack of interest; rather, closed eyes imply total trust and relaxation. (And whether you're saying something fascinating or boring doesn't much matter to the cat anyway.)

56 Stretching or curling?

Cats are notorious for being able to sleep practically anywhere. Regardless of the location, however, the sleeping position is definitely related to whatever the temperature happens to be. The basic rule: they stretch out when it is warm, curl up when it is cool. So you'll see a cat stretched out in the sun, but never curled up in the sun. If the room is cool, the cat will curl up into a ball, keeping his body heat turned in on himself. Even better, he will curl up into a human lap—or sidle up to an unaggressive dog, or even another cat.

57 The hiding instinct

Throughout this book you will run into this fact over and over: cats are only partially domestic, and some of their wild instincts will always remain. You see this in their choice of sleeping places: make a box, bag, open drawer, closet, even a suitcase available, and they will probably sleep in it. Why so, especially if you've seen them week after week sleeping openly on the floor or the bed with no fear of attack? The old instinct is still there: find a safe and enclosed place to sleep. A variation on this is an elevated spot, such as a windowsill or the branch of a tree—high up and, above all, *safe*.

58 The need (?) for a bed

You don't have to be an experienced cat watcher to know that cats can sleep darn near anywhere—your bed, carpet, tile, linoleum, concrete, gravel, grass, a tree branch, even on top of radiators. Unlike humans, cats do not require a soft (or flat) surface for sleep. In fact, part of the joy in owning a cat is

observing all the varied places he chooses to sleep. Given that obvious fact, why do owners buy special beds for their pets? Go with the obvious answer: cat beds, like numerous other pet products, are made to appeal to the owner, not to any real need of the cat. If you buy your cat a bed, he will probably sleep in it—there, and everywhere else in your home.

59 The fan blade syndrome

If you've just come home from a drive and your cat is outside, there's a good chance he will seek out the hood of the car, taking advantage of the warmth, especially in cold weather. Cat owners have come to expect kitty footprints on their cars as an inevitable part of having a pet. Unfortunately, there is a downside to cats seeking out the warmth of a car: on occasion they will crawl up inside the hood (warmer there than on top of it, obviously) and, sadly, some cats have met their death by falling asleep on the engine and being cut by the fan blades when the vehicle is started again. On a happier note, though, some cats have survived after traveling several miles under the hood of a car.

60 The radiator bed

Not many homes have radiators now, but in those that do, the radiator is a prime sleeping spot for cats, since it's a nice source of moist heat. Cats willingly sleep on top of any heat source that won't actually burn them. This does not harm them, but it does tend to dry out their fur, especially on the belly, making them shed more. If the cat is a radiator sleeper, a thick towel or small blanket atop the radiator is a good idea to prevent belly dryness.

Predators Will Hunt

61 Playing with their food

It's been observed for centuries: cats play with their prey before finally killing it. A cat pounces on a mouse but instead of chowing down at once, he swats at it, tosses it into the air and otherwise prolongs the death for several minutes. Many humans find this rather sadistic, but words like *sadistic* hardly apply to an animal that, by nature, catches and kills other animals. One thing that surprises some people is that the cat may continue to play with the prey *after it is dead*. Here's something that won't surprise you: if the cat is *really* hungry, he will eat his prey without playing with it.

62 Attack!

Some owners are disturbed by watching their pet stalk and kill something, but in fact cats are natural predators, and their technique is poetry in motion. A hunting cat keeps low to the ground and uses a natural cover (such as plants) for concealment. The closer to the prey, the slower the cat advances. When lying in wait, only the tip of the tail moves. Cats are good judges of distance, leaping to attack when they know they can reach the prey in two or three bounds. They rarely miss their target, of course.

63 Hunting: nature or nurture?

You don't have to teach your cat to chase birds, rodents or fish, for the predator instinct is very much in his genes. However, it is true that the hunting instinct is affected by what kittens see their mother do. A mother cat living in the wild or on a farm will catch rodents or birds and, of course, bring them home to the kittens. But they won't eat right away, for the mom cat will release the prey and allow the kittens to capture it again, and even compete with them for it. The killer instinct is already there, but mom is nurturing it with this training. Needless to say, kittens who observe their mothers killing prey become more effective predators than kittens raised in a cat-food-only home.

64 Eating what you kill

It's a standard line among human hunters: a good hunter eats what he kills—which means that you don't kill for the sheer pleasure of killing, leaving a dead beast to lie and rot. Well, a cat in the wild definitely follows that rule, devoting its predator skills to finding food, not engaging in sport. But well-fed house pets don't follow that rule at all. They gladly kill when they aren't particularly hungry, and they will even kill nasty-tasting things like shrews, which they have no intention of eating (and which, if the cat was hungry, he wouldn't bother pursuing).

65 Will they eat bugs?

Indeed they will. The human eye (and mind) draws a distinction between "higher animals" (mammals, birds, reptiles) and "just bugs," but cats' eyes don't. Cats have no conception of biological classes, whether an animal is a vertebrate, invertebrate, warm-blooded, cold-blooded and so on. Domestic cats retain their predaceous instincts, and their prey can be a mouse or a bird or a lizard . . . or a grasshopper. Probably the first prey of kittens is something small and easily caught, such as the nearest bug. All these creatures fall under the very broad category of food. While a well-fed adult house cat is unlikely to go after an insect, feral cats are not so finicky.

66 Don't play with your food!

Human parents tell their kids not to play with their food. Cat parents don't do so, and kittens do indeed play with the food served to them—or more pre-

cisely, try to kill it before eating it. The predaceous instincts are so strong that even a very young kitten will sometimes pounce on a bowl of food, even though that food is about as "dead" as can be. The kitten seems to think that, since this is food, it has to be "killed" first. As they mature, kittens seem to learn that the food given by humans is not "prey" and doesn't need to be attacked before being eaten.

67 Chattering teeth

Humans associate teeth chattering with cold temperatures, but you won't ever see your cat's teeth chattering for that reason. Rather, chattering is the "frustrated hunter reflex": the cat, a natural predator, is in a place where he spots a potential prey, but he can't get to it, so his teeth chatter. You may have observed this when your cat was sitting on a windowsill, looking out at a bird, lizard, mouse or other outside creature. The cat's teeth would not chatter if the cat was *outside* the window, with the prey within reach.

68 The bird predator myth

It's no myth that cats are natural predators, and, yes, they do eat birds. But nature lovers have unfairly exaggerated the role that cats play in decimating bird populations. While cats do indeed eat birds, they also eat mice and rats, which themselves

are notorious for preying on young birds and eggs. Cats actually aid birds by keeping down the population of egg predators. (Cats do not eat eggs.) Cats also prey on several other egg eaters—blue jays (the most notorious nest robbers in the world), young raccoons, young opossums, and the like.

69 Will a cat fish?

Of course it will, as any owner of an aquarium or goldfish pond knows. Yes, cats hate water, but cats just love fish for dinner, so many a cat can forget (for a few seconds) his fear of water and dip his paws and claws into a fishbowl. At times the willingness to fish is more urgent: a house cat in the wild who is seriously hungry and hasn't managed to find enough birds or rodents will seek out a stream or pond, hoping for a fish dinner, and will even (if things are truly desperate) wade into the water to do so.

70 The no-lizard rule (seldom obeyed)

Any small creature is a potential prey (and meal) for the house cat, and in Florida the most common small creatures around the house are the many species of lizards available—anoles, geckos and several others, none very large, all harmless to humans, and all tasty to cats. The author's cat is a typical Florida cat, making a meal of whatever lizard is

foolish enough to enter the house or the garage. The received wisdom is that the skin of these lizards is toxic, so cats should not be allowed to eat them. In this situation, the author is more willing to trust the cat than the supposed human experts.

7 Why hunt when you're full?

The wives of hunters ask this question, and so do cat owners. In olden days, men had to hunt to survive, ditto for cats. It's a "guy thing," and a "cat thing," too. Your cat may be sleek and well fed, but let a bird or rodent come within sight and the predaceous genes take over. Sometimes the hunt can be more involved than that, with a cat waiting by a small hole for hours for the desired prey to come out. A lot of waiting, a lot of stalking, then a few seconds of pursuing and killing. Perhaps men who truly enjoy hunting have a better understanding of the cat as predator than others do.

72 The cat-chicken truce

Since ancient times, every farm had its chickens and its cats, and somehow they lived together in peace—usually. In my own experience, our family's aggressive and hyperactive Siamese tomcat had no qualms about killing and eating baby chicks. And why not, since cats like to prey on birds, and what easier prey than birds that can't fly? But the usual

rule is that cats have a certain grudging respect for barnyard chickens, partly because mother hens are very protective of chicks and partly because roosters are a force to be reckoned with too.

$73\,$ A semi-dead token of affection

The author has had half-dead lizards dropped in his lap or at his feet, and countless cat owners get presented with similar "gifts"—dead or half-dead birds, mice, toads and so on. It horrifies some people but delights others. Give a cat credit for good intentions: an animal who is mostly selfish is sharing the spoils of the hunt with you. There may be some pride involved, too, which you can see on the face of a cat marching home with the prey held high in his mouth. A combination of "Look what I did!" and "Here, master, I brought you something!" Isn't it kind of silly to get angry when this happens?

74 Scavenger buffet

If you've ever lived in a situation where your household garbage had to be put in a Dumpster trash receptacle, you may have had the funny (but frightening) experience of opening the door and having a cat (or several) jump out wildly. The cat was probably scavenging for food inside, and while he might have been someone's pet, he was most likely a feral cat dining at one of his favorite feeding sites. Humans throw away

a lot of high-protein garbage, and feral cats (especially in urban areas) find any open garbage container to be a great source of food. Feral cats still *hunt* for a lot of their food, of course, but much of it is supplied by wasteful humans' table scraps.

Defense and Offense

75 Go for the gut

Cats use their hind claws to scratch themselves, but those long hind claws serve a defensive purpose as well. A cat under serious attack by another animal will roll onto its back and use its large thigh muscles and its hind claws, aiming at the attacker's belly. The aim is, of course, to literally go for the guts, perhaps even to disembowel the enemy. (Owners, if they behave themselves, are never on the receiving end of this.)

76 Not glad to meet

The author C. S. Lewis noted that cats seldom seemed to like each other, and he had a point, especially in regard to first encounters. Most cats feel threatened when meeting a cat they've never seen before, and two unneutered toms can be hostile in a very noisy way. Normally the two approach each other with tails moving slowly from side to side, all

the while making direct eye contact. The smaller of the two cats may size up the situation and slink away, but if two cats feel they are evenly matched, they will walk past each other; then, one will spring onto the other, who will roll onto his back. The one on top will try to bury his teeth into the other's nape. While lying belly to belly this way, they will claw, bite, urinate on each other and create the noisiest ruckus cats are capable of. At some point the attacker will jump free, giving the other a chance to slink away or engage in a counterattack.

77 Paws together = 1'm scared

A truly frightened cat will not only hiss and arch his back, he will literally gather all four feet together under his body, as if his back feet were moving forward and his front feet were moving backward. The cat seems to be preparing for any eventuality—springing forward, leaping straight up, jumping backward or otherwise responding to what the perceived enemy does.

78 Urban manners

Sociologists have long noticed a basic fact about human beings: the farther apart they live, the more pleasant their relations are. The flip side: the closer together, the more fights and murders. Stating the obvious, there are more assaults and murders in cities than in rural areas. This seems to apply to cats as well. Jam a lot of cats together in a city, and you can count on some loud nocturnal battles among toms attempting to stake out their territories. And no wonder: a farm cat might have ten acres to himself, while city cats have to share a relatively tiny amount of space. "Good fences make good neighbors" doesn't apply if you are small, agile and can easily climb on the tops of the fences!

79 Hiss vs. growl

Neither is exactly a sign of pleasure, but hisses and growls don't communicate quite the same thing. Basically, a hiss is a sign of fear. Something in the vicinity has really rattled the cat, who hisses at it and, if pressed, will attack but, more likely, will try to flee. A growl is more of a sign of anger and aggression than of fear. If you've ever witnessed a serious cat fight (see 76), you'll hear both cats loudly growling throughout the whole ordeal.

80 Read the eyes

Is the cat frightened, or fighting mad? The eyes are a good signal. When a cat is frightened, the pupils of his eyes dilate. (And if you're familiar with cats, you know those pupils can become *really* large.) You may literally see red in the eyes of a frightened cat, because the retinal blood vessels may be visible through the dilated pupils. The pupils of an

aggressive, angry cat will constrict rather than dilate.

81 The significance of "belly up"

A cat basking in the sun may lie on his back at times, but in interactions with humans or other animals, "belly up" is bad news. It means the cat is the loser in a two-cat brawl. It frustrates many cat owners that cats, quite unlike dogs, don't usually like to be held on their backs while their bellies are rubbed. But, obviously, the cat associates "on my back" with "I'm in the middle of a fight!" It is not a position with pleasant associations. If you're fortunate enough to have a cat who willingly exposes his belly for you to rub, you can assume the cat trusts you totally.

82 Blessed are the peacemakers

How do you make two cats get along? That is a logical question if you have a cat and are bringing in a new one, but it also happens that, for whatever reason, two cats who have gotten along suddenly start fighting. Here is one peacemaking technique: keep the cats separated for a time, then put each in a separate cage or carrier. Next, put them in the same room several feet apart and then feed them at the same time. Gradually, over a period of a few days, move the cages closer together at each mealtime. Eventually the two should feel more relaxed near

each other, so that in time they can eat in the same room together with no aggression.

Cat vs. Dog

83 Must cats and dogs fight?

There is plenty of truth in the old phrase "fight like cats and dogs." In nature, the two would avoid each other and fight only if they happened to meet. However, humans have brought them together under the same roof, and they can in fact get along just fine, particularly a kitten and a puppy who are raised together. An adult dog and an adult cat may require a period of adjustment, but they will learn to be friends or at least to tolerate the other. The sight of a cat and dog curled up beside each other in blissful sleep is not all that rare.

84 The occasional kitten eater

Having just said that cats and dogs can get along, a word of warning: some dogs have a strange—and dangerous—reaction to very young kittens. In a word, they eat them. Sadly, this can occur even if the dog had been friendly with the mother cat. Dogs and cats are both creatures of instinct, and even a dog comfortable with adult cats may look upon tiny

kittens with their high-pitched mewing as (alas!) something to eat. Naturally the mother cat, if present, will fight the dog tooth and claw, but the dog is more likely to do its dirty work while the mother is absent. A word to the wise: if your cat just had kittens, try to keep them out of the way of dogs.

85 First blood

If cats and dogs fight, you can rest assured that the dog started it, even if unintentionally. A dog might be attacking—or might be licking a sleeping cat in a perfectly friendly way. Either way, the cat's space has been invaded and he won't tolerate it. In the case of a clearly aggressive dog, the cat will assume his classic "inflated" posture—back arched, hair bristling out, looking larger and more menacing than before. It's a bluff, since the cat can't kill a large dog, while a large dog can kill a cat (see 86). But many dogs will be taken in by the "inflated cat" and be content to bark and nothing more. The cat whose bluff fails will run when he can or fight if cornered. But the cat is never the aggressor in a cat-dog battle.

86 The neck snap

Both dogs and cats seem to understand a secret of killing: break or sever the spine and your work is done. A cat delivers the deathblow as a sharp bite to the neck, trying to sever the spinal cord. Alas, predator sometimes becomes the prey, and a cat who finds himself in the grip of a large and aggressive dog may die quickly if the dog grabs the cat by the neck and gives him a quick and life-ending snap. If you've ever seen this happen (and I have) it seems terribly cold-blooded. Suffice it to say, if you and your cat live near a large dog, do what you can to keep your cat out of harm's way. The dog is just doing what comes naturally, but that isn't much consolation if a beloved pet dies.

And a Few Choice Behavioral Tidbits

87 Water—yuck!

Like all animals, cats require water for drinking, but house cats are notoriously averse to getting *in* water. In spite of that, they can swim, though they make for shore as quickly as possible. In fact, all species of cats can swim. Lions and leopards do it reluctantly, but, curiously, tigers and jaguars enter the water with no hesitation and actually seem to take pleasure in swimming.

88 The dreaded B word

Bathing, that is. In general, it should never be necessary, given that cats are cleanliness fanatics. But accidents happen: they get splashed with mud or motor oil, fall into a puddle—in short, they need cleaning

that their tongues just can't handle. Needless to say, bathing a cat (especially one that is not declawed) is a daunting task, but some owners do it often, and apparently cats can learn to tolerate being bathed. Suggestion: arm yourself with gloves and an apron, and pray for patience. (Note: A few breeds, including the Turkish Van, actually seem to *like* bathing.)

89 The dry-cleaning alternative

If you survived giving your cat his first water bath, you might be thinking of possible alternatives. In cases where the cat isn't terribly soiled, you can "dry clean" him by sprinkling him with talcum powder and then brushing it out. Pet stores also have dry shampoos that function the same way. Some owners give bran baths, using bran sold for either humans or horses. The bran is heated in an oven, then massaged into the fur, then brushed out, taking dirt and oil with it. In the case of tar or oil on the hair, you can daub the spot with mineral oil, let it set for several hours, and then try to swab it off with soap and water.

Making the squirrels chatter

Squirrels are rodents. They hate and fear cats, and with good reason, because cats can climb trees. If you have squirrels on your property, you are probably aware that when they see a cat, they immedi-

ately head to the highest part of the nearest tree and raise quite a ruckus, chattering noisily to one another. This distinctive chatter (which some people mistake for birds) is both a cry of fear and a warning to any squirrels in the vicinity that—horrors!—a cat is nearby.

91 Cats in cars?

If you've ever emerged from your car with several nasty scratch wounds, you probably learned (the hard way) that cats don't like to travel in automobiles. Everything about the experience disturbs them: the engine noise, the stop-and-go movement of the vehicle and, probably the worst aspect, other vehicles passing by. They meow noisily, and some will scratch anything available, including you. Most cat owners choose (after losing blood) to put their cat in a cage or carrier when he has to be transported. However, some cats can learn to ride peacefully in a car, but only if you train them as young kittens. Kittens who remain placid on a trial run may turn out to be among the few happy car cats around.

92 No heaving in the car

Most dogs *love* to ride in cars and are fascinated to pass by things they haven't seen before. The bad news is that many dogs get carsick and throw up in

the car. Not so for cats. Assuming your cat rides well in a car (see 91), you need never fear him getting motion sickness, for a cat's legendary equilibrium will keep him steady. The average cat detests riding in a car, but not because of balance problems.

93 Feline melomanes

Do cats love music? Some owners claim their pets seem happy curled up next to a speaker—assuming the speaker is emitting something pleasant and harmonious, that is. At least one writer has referred to cats as *melomanes*, "music lovers." The author's own opinion is that a cat's preferred environment would have no sound at all, but that cats definitely prefer pleasant music over any kind of noise, whatever the source.

94 The bag drag

If your cat really trusts you, you can do things with him no stranger would be allowed to do. One pastime that a few coddled cats will endure (and even enjoy) is the bag drag, which needs to be done on either wood or linoleum: have the cat lie in a bag (either paper or cloth) while you spin the bag in a circle, the cat's belly touching the floor. The majority of cats probably wouldn't tolerate it, but a few seem to like the gentle friction generated by the spinning.

95 Kitty falsetto

We do it without thinking: call out "Here, kitty" in a high-pitched voice. Both men and women will, for reasons we never analyze, pitch our voices an octave or so higher than normal when calling a cat. The habit actually makes perfect sense, for the simple reason that cats' ears are sensitive to higher-pitched sounds. Those hypersensitive ears are much more likely to respond to a soprano than a bass. (Then again, even after hearing you, they can still choose to ignore you.)

96 Cat alarms?

We cat lovers joke about our slumbering pets, assuming they would probably sleep through a fire or would exit the burning house with no thought for us. We tend to assume that the only threat to a burglar would be that he might trip over the cat in the dark. Dogs, so people assume, are the "hero pets," warning their owners of fire or other dangers. But in fact there are true stories of cats waking up their owners when the house was on fire or raising a ruckus when someone was breaking into the house. There are even cases of cats saving the lives of people (or other cats) who were being attacked by vicious dogs. Yes, cats do seem to be selfish creatures, but they do have their noble moments.

97 Making eye contact, George Burns style

It's a basic rule of good communication: look people in the eye when speaking to them. It seems also to apply when humans communicate with cats, for cat experts observe that a timid or frightened cat responds to direct eye contact with a human—not an intense stare (which intimidates cats) but unbroken eye contact involving a slow blink (think of comedian George Burns). The experts think that the slow blink is the cat equivalent of a warm, welcoming smile.

98 The vacuum—friend or foe?

Most cats despise and fear vacuum cleaners (so do most dogs) because of the noise they make. To the cat, the vacuum is like some noisy, threatening animal. But a few cat owners manage to get their cat comfortable with a vacuum cleaner, enough so that they can use a hose attachment and groom the cat. This is amazing to watch, but if your cat will tolerate it, wonderful, for it is a tidy way to groom loose and dead hair off cats, especially longhaired ones. But don't be surprised if your cat won't cooperate.