

NURTURING

# Bringing Up Baby

Raising a kitten to be a great cat. BY JOELLE RENSTROM



Kittens rapidly learn socialization and behavioral skills as early as 2 weeks old.



In kittens,  
nature  
and nurture  
combine to create  
temperament.

**I**'ve had my cat, Zola, for 21 years, since I was a junior in college. She waits at the top of the stairs when she hears my keys in the door. She comes when I call her, sleeps snuggled against my stomach, and has a knack for making me laugh. She's not aloof or indifferent—even dog people like her.

I've always wondered if her upbringing during my wilder years shaped her irresistibly quirky personality. For cats, like kids, both nurture and nature powerfully influence who they become. While no one has absolute control over how their pet (or child) will turn

out, owners mold their cats' behaviors and personalities, for better or worse.

First of all, it's important to recognize that personality and behavior aren't the same thing. One might be antisocial but still act chatty and outgoing at a work function. A person has to learn to behave appropriately in various situations, just as pets do—both kids and pets are potty-trained, for example. Behavior can be taught, but personality is comprised of genes, early influences, traumas and other factors, some of which we've not yet identified.

The prime time to socialize kittens is between 2 and 9 weeks

## LEND A HAND

# Fostering Kittens

**ONE WAY TO HAVE AN IMPACT ON** kittens during their most formative time—between 2 and 9 weeks old—is to foster cat moms and offspring during that critical period, alone. It's common that people end up adopting at least one of their foster cats, but even if you don't take one, you make them more “adoptable and adaptable for others,” says cat consultant Mikel Delgado. If more people fostered kittens and—in addition to providing the necessary food, shelter and veterinary care—taught them that people are safe as well as how to play and interact with both people and animals, then cats might not have the reputation for being so aloof.



A newborn kitten is so tiny, she can fit in the palm of your hand.

Sarah Chauncey, cat rescue volunteer and manager of the Facebook page P.S. I Love You More Than Tuna, says fostering can also help owners heal from the death of a beloved cat by providing “feline contact without the heartbreak.” Not only are people at cat-rescue shelters understanding with and supporting of grieving owners, but volunteering itself helps “break the cycle of rumination that's so common when we're grieving,” she says. Given how goofy, adorable and joyful kittens are, it's easy to be present around them: “They're great teachers of living in the moment,” says Chauncey.

of age, according to Mikel Delgado, certified cat behavior consultant and founder of Feline Minds, an organization that offers cat consulting. This is when kittens' brains absorb information like sponges: "They rapidly learn what's safe and dangerous, and it's a good time for them to have good experiences with different people and animals," she notes. Kittens can learn that people are safe, affectionate and fun, which helps them become more social. Acclimating them to the carrier or the car during this period makes vet visits easier on everyone.

The problem, though, is that most of us don't yet have our cats when they're between 2 and 9 weeks old; the average kitten adoption age is around 12 weeks of age. We can't control what or who influenced them before we got them, but we can still affect their temperament over time, primarily by changing their behavior—which owners can do at any point by following some general guidelines.

## POSITIVE REINFORCEMENT

Delgado's biggest tip is to "give them experiences that will make them happier," which in turn makes them display more desirable behavior. All cat owners should provide a secure environment, including high spaces from which cats can observe their surroundings; hiding spots; and objects that are appropriate for scratching and playing. Cats need to have some control over their environment, particularly when it comes to ways to escape danger or stressful situations, such as loud noises, other animals and toddlers.

Despite their aloof reputation, cats like to hang out with their people. One common complaint among cat owners is the state of their couches. Delgado says the problem is often that cats want to scratch something

## THE GOOD KITTY

# To Punish or Not to Punish?

### MY FRIENDS' CAT JUMPS ON THE

dinner table every time we sit down to eat. Its hair gets in the food; it bats the salt shaker onto the floor and generally is a nuisance. Eventually, they shut the cat in the bedroom, but I always wonder why they don't discourage the behavior with a squirt gun.

"Do you have a squirt gun?" Mikel Delgado asked me when I told her about this scenario.

"Of course," I said. "I kept one on my nightstand when Zola kept me from sleeping."

"I'd advise you to throw away your squirt guns," Delgado said.

What?! The system worked brilliantly.

Zola would start her 3 a.m. shenanigans, which usually consisted of her sharpening her claws on the underside of my mattress—and I'd grab the squirt gun, aim under the bed and let her have it. She'd sprint out the door, and I'd go back to sleep. She didn't keep it up for long and eventually ran away every time I even reached for the squirt gun.

Just as children need discipline, I always assumed cats do too. But Delgado argues that punishment for cats is inappropriate, because they can't understand what they've done wrong. Making a loud noise scares a cat, and the cat doesn't interpret the noise as a punishment for prior behavior. A cat who gets chased or tossed out of a room

might think its owner is playing a game. A squirt gun doesn't deter bad behavior in the long run, says Delgado. "[The cat will] be back on the counter in 10 minutes."


It's crucial to recognize the motivation behind a cat's behavior. Does it crave attention? Does it need to scratch or hide? Is it bored? One common misconception is that cats act out of spite. Say a cat uses your boyfriend's suitcase as a bathroom the day after he moves in. It's easy to assume that the cat doesn't like your boyfriend or that it's jealous or angry, but the actual motivation

is likely an unmet need—maybe the cat didn't get much attention during the move, or perhaps the suitcase and other belongings block a favorite hiding spot. Most behavioral problems can be alleviated by meeting the cat's

needs. Is it getting enough exercise? What about mental stimulation? Are there enough Delgado recommends what she calls "punishments from God," or environmental punishments. If you need to stop a cat from counter surfing, put a sticky place mat or tape on the counter that makes the experience unenjoyable. If your cat chews on plants or cords, spray them with bitter apple. Wrap tinfoil around the couch leg your cat won't stop scratching. Such environmental deterrents train the cat that these behaviors aren't worth it, without them being directly related to you.



**Kittens get into all kinds of trouble. To help them behave, dispense treats, not punishment.**



A kitten's  
brain is like a  
sponge: Teach  
yours to recognize  
danger and to  
have fun.

This kitten is riveted by the camera; those same powers of observation will help her throughout life.

Like humans, cats have a flight-or-fight stress response.

Curling up inside a cardboard box allows cats to generate and maintain heat.

Keeping a box around is an easy way to get your cat to take the equivalent of a deep breath.

in the room where everyone else is. So if the scratching post sits in a seldom-used basement room, the cat won't use it; but if you move it into the living room, the cat will. "The best way to change a cat's behavior is to change their humans' behavior," Delgado says.

Positive reinforcement is the best way to get cats to learn specific behaviors. The downside is how often people inadvertently reward cats for bad behavior. If your cat yowls at night for food and you feed her to quiet her down, you're teaching her that her behavior yields the reward she desires—and she'll never stop. Getting out of bed or giving her attention also reinforces the behavior. When cats act undesirably, the best course of action is to ignore them—which, of course, is the hardest thing to do.

## THE POWER OF ACCEPTANCE

No amount of training or positive reinforcement will guarantee that a cat will be "everything you want them to be," Delgado says. She urges people to accept what their cats want—if your cat doesn't like being held, for example, don't force it.

She also encourages people to have realistic expectations. Cats are not dogs—that doesn't mean they're a lesser animal or companion, but it does necessitate different expectations. Humans domesticated dogs long before we domesticated cats, and dogs were actually bred to be social, to be "man's best friend." Cats were bred to be cats—and maybe to catch some mice. It's only relatively recently, Delgado points out, that we have asked cats to stay indoors and to meet more of our

Your kitten needs your attention and company.

emotional needs.

Still, the idea that cats aren't capable of the same emotional relationships with people is a misconception Delgado wants to debunk. When I tell her that Zola acts "like a dog," I play into one of her pet peeves. "It's not unusual for cats to be very bonded to their owners and crave attention and company," she says. "Your cat is exhibiting cat behavior, not dog behavior." Maybe Zola isn't as exceptional as I think, but ultimately, whether due to nature, nurture, luck or some combination thereof, I don't really care how she got to be the ideal companion. 🐾



## HIDE IN PLAIN SIGHT

# The Cat in the Box

### CATS CANNOT RESIST BOXES.

When I get a package in the mail, my cat waits for me to unpack it and then immediately dives in. Sometimes she naps, sometimes she picks at the cardboard with her claws, but most of the time she just sits there contently. Such behavior is universal among cats—even among big ones. YouTube videos show lions, bobcats, leopards, tigers and other predatory felines playing with and lounging in massive cardboard boxes. Is box love in cats' DNA?

Cats can get stressed and anxious. While cats have evolved to manage lifestyle stresses (like humans, their hormones and nervous system elicit a fight or flight response), long-term stress associated with domestication or humans can be more difficult.

Cats can get stressed if they lack proper food, water or litter boxes—or if they live with other cats, dogs, toddlers or owners who insist on more socializing than the cat seems to desire.

Research also suggests that cats are sensitive to their owners' stress levels, so that bad day you had at work could also affect your feline. Just as with humans, stress affects not only a cat's behavior but also its physical health.

When cats get stressed or anxious, they hide. Research conducted by Dutch veterinary-medicine professors found that access to boxes reduced stress in shelter cats. The cats with access to boxes adjusted to a level of "recovery" after two days, while the cats without boxes didn't attain a similar level of adjustment until

two weeks had passed.

Boxes also offer warmth. A National Research Council study found that domestic cats prefer temperatures between 86°F and 97°F because they don't have to expend energy to warm or cool themselves. Curling up inside a cardboard box allows cats to generate and maintain heat, which adds to the cozy, secure feeling. Maybe that explains why cats enjoy stuffing themselves into boxes half their size?

Keeping a box or two around is an easy way to get your cat to take the equivalent of a few deep breaths. If you move, have a baby, adopt another pet or have a situation that might result in stress for your cat, putting out an extra box or two might help—and it's cheaper than therapy.

## COMPOSING FOR CATS

Creating the *Purrfect* Music**YOUR KITTEN WON'T RESPOND**

to human music, but composer and cellist David Teie aims to give the joy of music to cats by taking the feline brain into account. He launched his effort to create music for other species with cotton-top tamarin monkeys, who “showed little interest in human music” but were excited by Teie’s enlivening melodies and calmed by his calming compositions. Next, he began composing for the domestic cat. “Cats were widely kept as pets, allowing us to easily share music with them,” Teie explains.

Teie’s efforts have long been studied by psychologists Charles Snowden and Megan

Savage, whose work has been published in major scientific journals.

A Kickstarter campaign raised enough money to produce CDs and digital downloads, now available at [musicforcats.com](http://musicforcats.com).



This striped kitten on piano keys knows it takes more than a keyboard to make music for cats.

**How did you study the connection between music and emotion?**

First, I took music apart, dividing it into indivisible elements. An example of such an element is pulse, a feature present in the music of all cultures. Then I asked the question of each element: Why would this affect human emotions? After a few years of investigation, had plausible answers for each of about 26 different elements of music.

**So you decided to test your theory by writing music for nonhuman species?**

Yes. Basically, animals don’t give a hoot for our music. I wrote music for cotton-top tamarin monkeys that was tested against human music controls by psychologist Charles Snowden. With his colleague Megan Savage, he then tested the effect of my music for cats and published the results in *Applied Animal Behavior Science* in 2015. The data on the cats were even stronger than the monkey data.

**Can you give an example of how it works?**

The pulse in our music is based on the pulse we all heard in the womb.

The brain structures responsible for emotions are almost completely formed at birth, and the fetus has been listening to the loud sounds (72 decibels!) of the womb for five months.

But the brain of a cat is an eighth the size at birth that it will be at 10 weeks, so most of the brain development happens outside the womb. I figured that a reward-related sound all cats would experience as their brains develop is the sound of suckling. As a result, the pulse in music for cats is a quick whishing sound.

**Are there special tools or software needed to make music for cats?**

A good deal of software was required to modify the recorded acoustic instruments in order to create [music for cats]. As

you can imagine, human music had lots of time and people to develop instruments. My favorite purr instrument required the combination of three sounds and instruments (including drumming on a toy football); five people (including the percussionist, recording engineer and sound designer); and four software programs to create a single two-second purr “instrument.”

**Would this kind of music work on all kinds of cats or just the common household cat?**

I am sure that everything would need to be different about the music for the big cats.

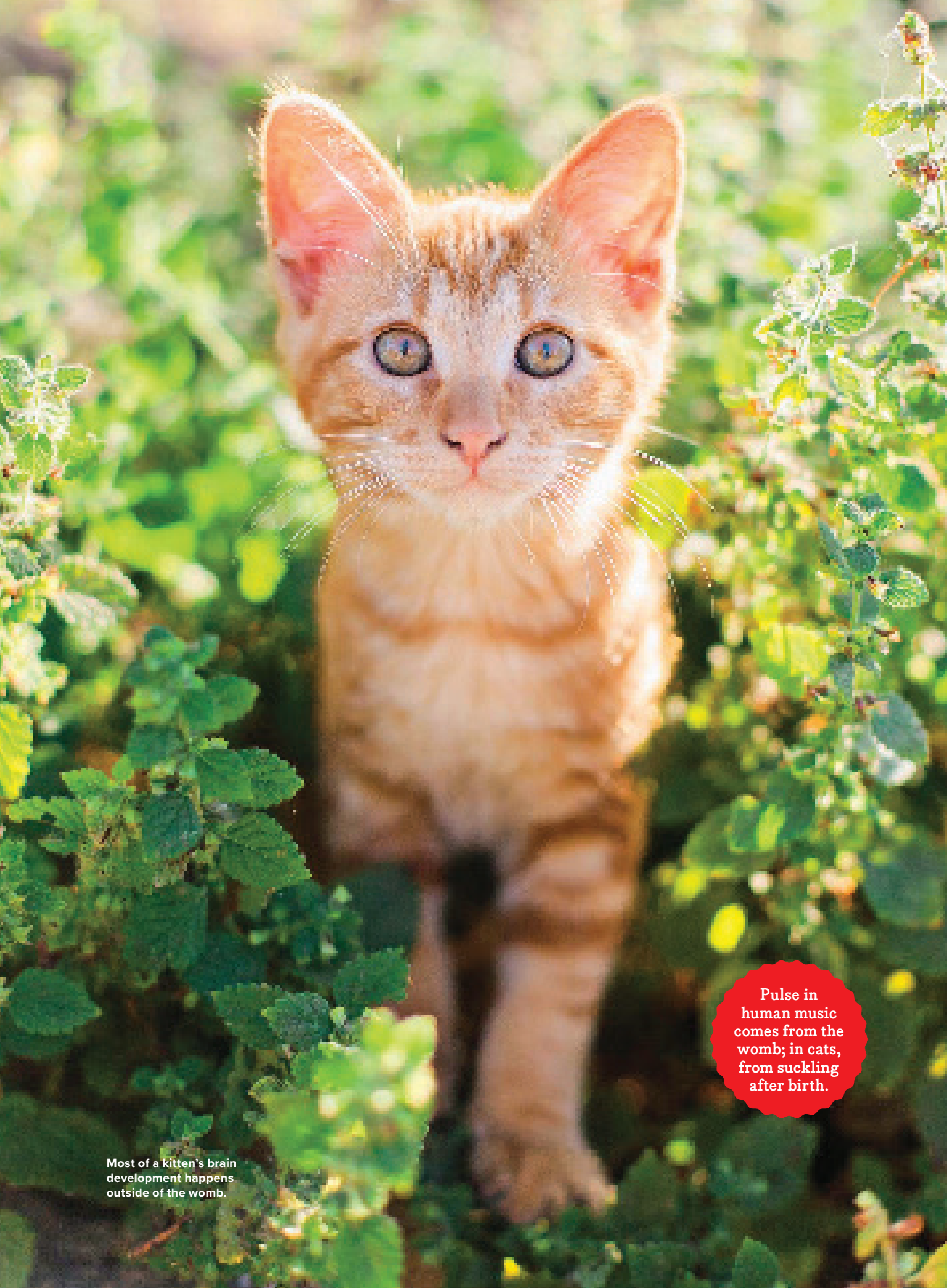
The suckling sounds would be similar, although slower. Of the big cats, I understand that only the cheetah purrs, and that purr is a bit slower than the domestic cat’s, so I believe the music could be modified for the cheetah. Providing enrichment for captive species is a primary goal of mine.

**What about music for other species?**

I had a failure in my test of music through headphones for horses. There was no response to the music. I think it was too soft and distant from the tympanic membrane to make any difference, and the headphones came off. Dogs are challenging, due to the variety of sizes in breeds and their connection to humans.

**What are your greatest challenges?**

Trying to think like a cat, hear as a cat hears and invent instruments based on natural and acoustic sounds. —Katka Lapelová



Most of a kitten's brain development happens outside of the womb.

Pulse in human music comes from the womb; in cats, from suckling after birth.