

Smol2Swol

2024 Annual Newsletter

Wishing you a Happy Swolstice!



**Thank you for
being part of the
S2S community!**

**Our community
helps us find
loving forever
homes for our
graducats**

**With our
deepest thanks
to the Small
Miracles Cat and
Dog Rescue**

**Small Miracles
staff and
volunteers are
the heroes who
make S2S
possible!!**



VOICES OF S2S

The S2S communications strategy is structured around adorable pictures, puns of varying quality, language drawn from elite training units, and fictitious events. Social meowdia engagement is conducted by our Director of Nommunications, Minhisster of Purropaganda, and Chief of Psychological Warfurr. All kiterature produced by S2S undergoes thorough purr review.



Thank you for a wonderful 2024!

Smol2Swol's classes of 2024 spanned the entire range of kitten experience, from injured orphans to plump polydactyls. This FY (feline year) included periods of relative calm for the purrogram, giving staff a chance to focus on the fundameowntals, but also intense periods that challenged us to improve our pawdagogical meowthods.

Please enjoy this year's Swolstice Mewsletter, which contains only the finest in fun feline features. S2S hisstorians' extensive records of the training progress of each class are available here: tinyurl.com/Smol2SwolClassAlbums. We hope that they bring you joy in the dark days of winter.



We wish you Happy Swolidays and a healthy New Year!

Purrogram Philosophy

S2S is a scientifically rigorous, empurrically-based program that aims to save little fuzzy lives and enrich human lives. We foster abandoned and stray cats, teach their kittens to be gentle companions, and then send them to out into the world to bring love and joy to their adopters. We aim to raise our kittens to know a world that has only shown them kindness.



Upcoming Events

In 2025, Smol2Swol will focus on exercising – not just our bodies, but all aspects of our beings – with community events every Saturday.

Stand-up Comeowdy

Exercise your public squeaking skills as well as your sense of humor at our open mic nights! Bring your most clawful puns, your most pointed satire, and your most biting wit.

Crosskit

Calling all cathletes! Purrsistence and a pawsitive cattitude will get you through our trainers' tough workouts, to exercise your meowscles as well as your mind.

Tricks and Treats

Pawty with us this Meowloween! Exercise your creativity and enter our homemade Pair Costume contest – think Catman & Robin, Cleocatra & Marc Antony, Catchup & Meowstard.



Training tip: Scratching

Cats need to scratch abrasive surfaces to keep their claws healthy, as well as to stretch their backs and legs. If you do not provide your kitty with proper devices to fulfill their fundamental need to scratch, then they will have no choice but to use your furniture! Cat scratching devices are made of a variety of surfaces, including corrugated cardboard, thin carpet, sisal or other ropes, and can be arranged in vertical, horizontal, or angled planes.

Cat trees typically include scratching surfaces on the poles, which are good vertical scratchers, but some cats prefer horizontal, so it's best to offer a variety of options. Cardboard scratchers are particularly convenient, and can be easily composted when they are shredded beyond recognition, but be prepared to vacuum up lots of little cardboard bits.



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*This newsletter is brought
to you by the Smol2Swol
preditorial team.*

SPOTLIGHT ON: Soft Paws

Kittens play quite roughly with each other, so they are shocked to learn that people must be treated so delicately. But they genuinely don't want to hurt you when they play, so with the right training, they can quickly learn to interact with you using soft paws.

Tail-or Communication

Cats do not understand human language! If you wiggle your fingers at a kitten and get scratched in response, then yank your hand back and say "Owww, that hurt!", all you've done is offer your kitten a toy, made the toy move in exciting ways, then made a noise. For all they know, you said "Wow, great job!".



So how can we communicate to kittens that they're being too rough? Kittens make a small squeak, like a high-pitched "ow" sound, to tell their peers "You're playing too hard!". Humans can also use these theatrical squeals to teach kittens that they need to be gentle. Squeaking at your kitten may feel a little silly, but it works! If your kitten is playing too hard, make a high-pitched squeak, and hold your hand very still – to a kitten, anything that moves is a toy!

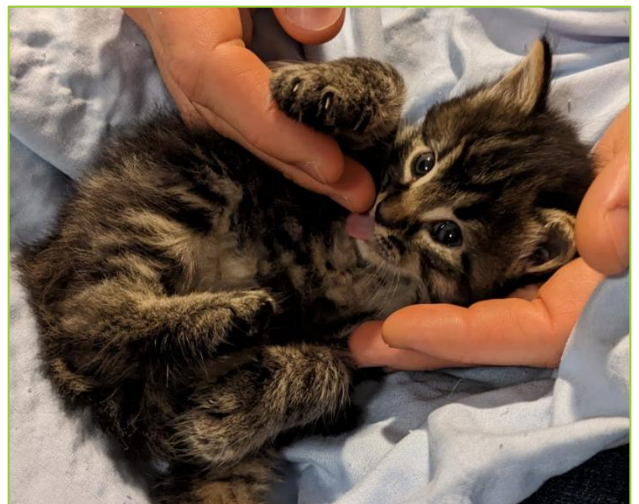
*TOP TIP: Consistency is key! Whenever your kitten uses claws, communicate to them that it's too rough, even if it doesn't actually hurt you. You're trying to teach your kitten to **never** use claws with people - not to sometimes use claws.*

Build Skills

Kittens have only been in the world for a few weeks at most. They must learn to control the retraction and extension of their claws, all while learning to interact with their peers as well as people. Patience and regular reinforcement of training concepts is critical as your kittens develop and improve.

Understand their Needs

Much like human children, kitten behavior is driven by their boundless energy. Accordingly, stopping a bad behavior is not enough, because that energy still needs to come out! So, also like human children, kittens respond best to interruption of a bad behavior followed by the substitution of a more desirable behavior. For example, a kitten who is chewing on a finger may be interrupted by gently blowing on their face, then the finger can be replaced by a stuffed toy or a small piece of cardboard, so they can continue to fulfill their need for play.





Alumni Meowntoring Purrogram Update

In 2024 the head of the Meowntoring program, Theodore Roosevelt, and his deputy, Mr. Marshmallow, tended to four separate singleton orphans: Mochi, Stuart Little, Cinderella, and Oliver. The importance of their care for our orphans, especially those who arrive petrified from stress, has become

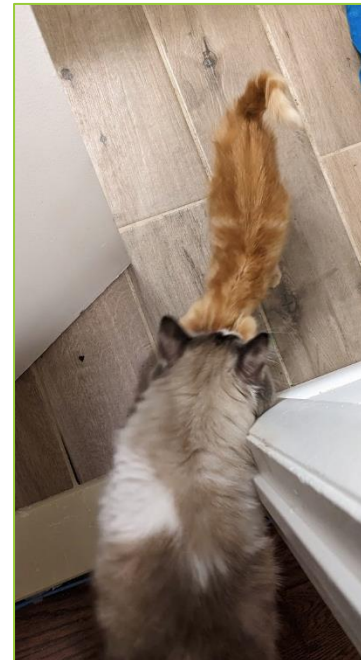
increasingly clear: humans struggle to communicate to these students that they are safe, but the Uncles persuade them very quickly. Many of our orphans are too afraid to even eat on their own, but are emboldened by seeing an Uncle tuck into the chow. So powerful is the meowntoring relationship that even just *hearing* an Uncle can soothe a frightened orphan; S2S Catdre maintain a set of audio recordings of the Uncles gently warbling, and play the recordings for terrified students to convince them that it is safe to eat.

CASE STUDY: OLIVER

Oliver arrived at S2S as a starving little wrinkled napkin, and cowered in a corner of his room, refusing to eat or interact with our training staff. Uncle Marshmallow heard his cries and asked to be allowed in; on first sight, Oliver leapt up and *ran* to his new meowntor, crying and rubbing his face into his magnificent mane. Once unlocked by Uncle Marshmallow's benevolent, fluffy, cloud-like nature, Oliver blossomed under the care of both of his Uncles, and soaked up their instruction in etiquette, play, and proper care of human companions.

CASE STUDY: STUART LITTLE

Our Uncles typically provide psychological support and scaffolded instruction in feline behavioral principles to our students who arrive without class leaders. But Stuart Little had different kneads: he arrived at our furrilities weak, exhausted, and with one leg dragging uselessly behind him. Uncles Teddy and Marshmallow both provided crucial support to Stuart Little's rehabilitation in the form of physical therapy for his wounded leg, in addition to their usual loving-kindness. Through their gentle encouragement to run and play, Stuart completed his PT purrogram and recovered full functionality in his leg.



Above left: Uncle Teddy purrsuading Stuart Little to eat and build his strength.

Above: Uncle Marshmallow 'unlocking' Oliver on his first day at S2S.

ASK A KITTEN TRAINER

A reader asks: Do the Uncles miss the orphans when they graduate?

Human and feline staff all feel conflicted when our orphan students graduate. Sending students out into the world to bring love and joy to their forever homes is the entire point, but after spending so much time with our students in training, of course we miss them dearly.



The Uncles take their work seriously, and when orphans around they are notably more vigilant. In that regard it is a bit of relief to them when the students go, because they can relax and not worry about safety, defense, or setting a good example for their students.

Smol2Swol and Climate Change

The heating of the Earth has led to surprising consequences for S2S. Most obvious is the impact of warmer temperatures on student enrollment: cats only mate in warmer weather, so shorter winters means longer kitten seasons.

Less obvious is the effect of climate change turbocharging the oceans and atmosphere with energy, which raises the odds of natural disasters and expands both their range and severity. S2S's HQ in Maryland is not historically prone to tornadoes, but in recent years we have experienced tornado warnings with increasing frequency, requiring staff to rapidly corral all feline occupants of the HQ building.

Pictured at right: the F Kittens (Part 1) contained in the basement during a tornado warning.



Class Photos

The following pages contain brief descriptions and photo spreads for each of S2S's classes of 2024. In-depth records are available in each class photo album at tinyurl.com/Smol2SwolClassAlbums.



Mochi

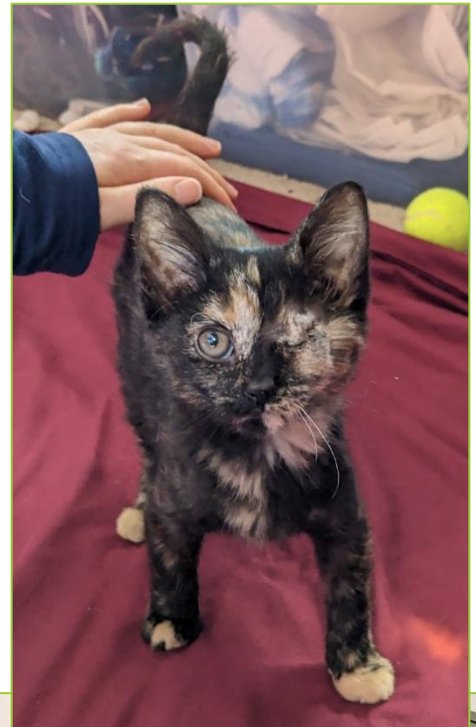
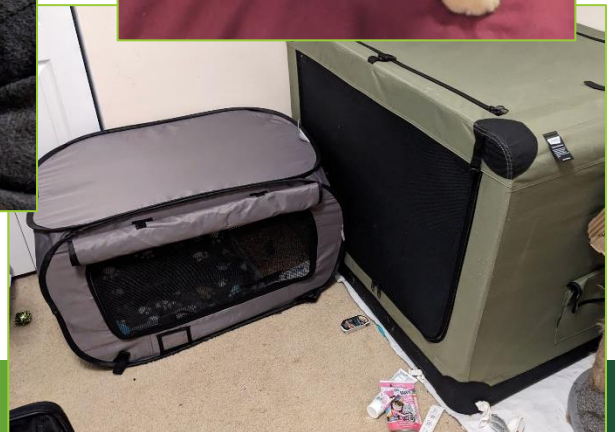
S2S chauffeurs picked up Mochi from his cage at Small Miracles, where he was hiding, terrified, behind a "CAUTION" sign. He spent a few days with our Swolcialization Specialists in the Cuddle Cube, then enrolled in the Meowntorship Purrogram. The uncles absolutely adored little Mochi, as did course staff, and he graduated in just three weeks as a brave, gentle cuddlebug.





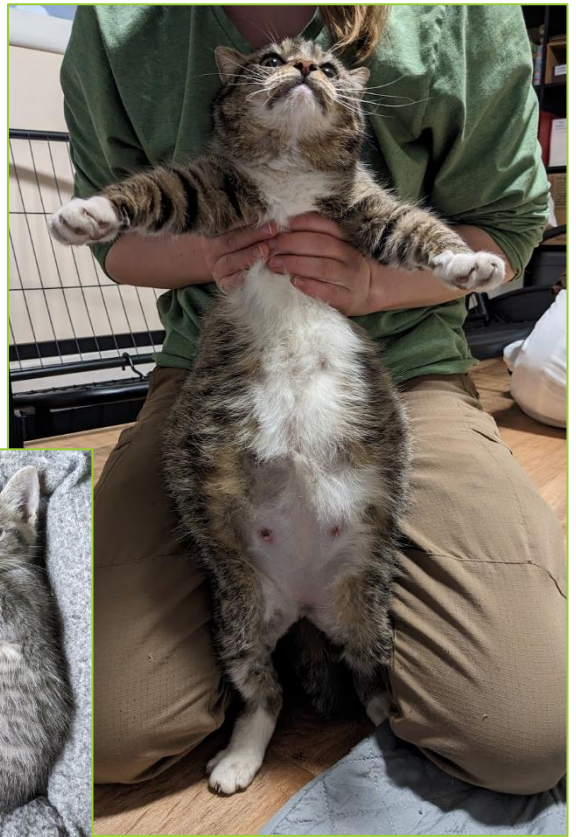
The F kittens I: Freddie, Felix, & Felicity

The F kittens arrived jammed in a single carrier with four kittens and one momma, all with respiratory infections and two with eye infections. S2S hosted Freddie and Felix until they were healthy enough for surgery, and then their sister Felicity in smolitary confinement while she was recovering from enucleation surgery. Careful tending (and a lot of antibiotics) successfully saved Felix's eye, and their gentle natures made their meowdical care easy. Felicity was under consideration for the role of Resilience Coach, but instead she graducatted to a loving forever home with her sister.



Camden and the Ballgame Snacks

Camden was brought to Small Miracles by her devoted rescuer, Carol, under the alias Missie Grey. She was the roundest cat we have ever hosted, and fiercely protected her Snacks through their journey to swoleness. The off-the-charts cuteness levels of Pretzel, Chip, Cracker Jack, Cheese Puff, and Sunflower Seed even led to accusations that course staff were using AI to fake their photos! Cracker Jack, known informally as 'King Chonko' due to his record-setting size, had S2S's first case of Swimmer's Syndrome, from which he quickly recovered with the help of teeny tiny physical therapy.



COURSE RECORD:
Swolest Student:
Cracker Jack



The F kittens II: Fluffy, Figgy, & Ferdinand

S2S's second set of F kittens enrolled in our finishing school / meowdical support purrogram. They arrived as rather pointy and scaredy cats, and left with a deep understanding of the value of human companionship, and the love and affection to which they are entitled. They graduated as very gentle and loving friends.



Sylvia and the Forest kittens

Mere hours after giving birth to five kittens under a bush, Sylvia retrieved her favorite person Patricia and gratefully allowed her to scoop up the whole family. Named in recognition of their sylvan origins, Firefly, Mushroom, Fern, Moss, and Acorn entranced course staff and visitors alike with their gentle natures and incredibly soft, fluffy fur.





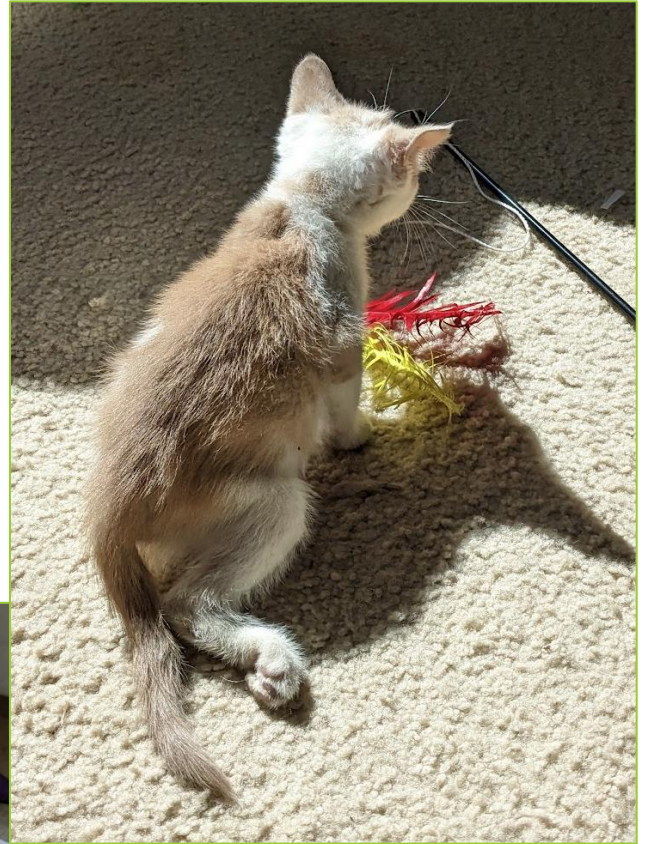
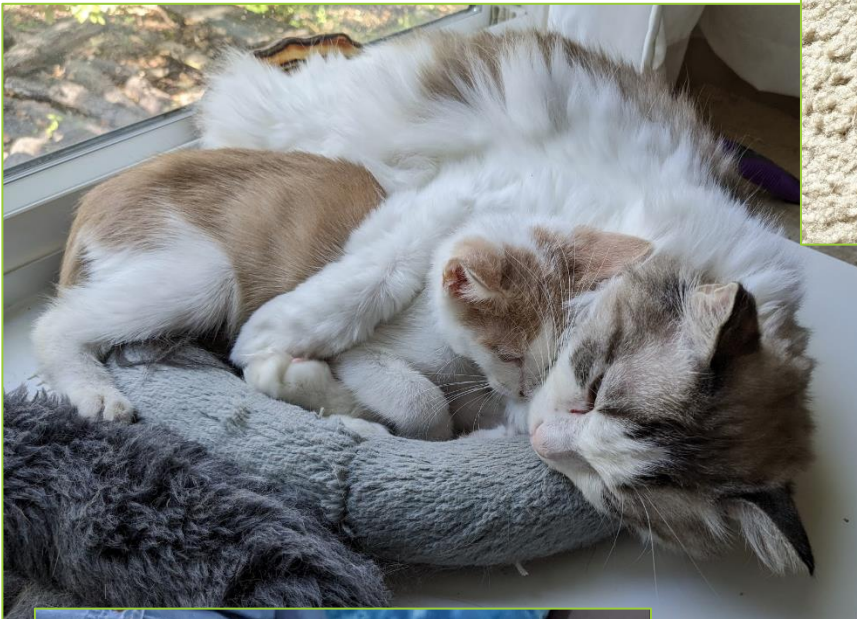
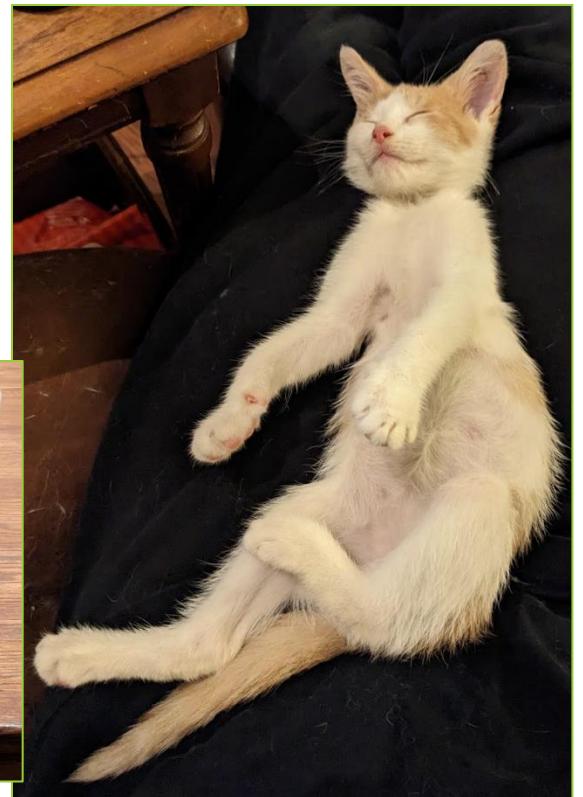
Willow

After appearing as nearly a ghost on an S2S adopter's purrveillance cameras, Willow was enticed onto the porch with snacks. She was limping slightly, and x-rays revealed the shocking cause – a shattered pelvis! Despite her agonizing injury, Willow was sweet, gentle, and loving with staff throughout her recovery and then treatment for Pillow Paw. She graducatted and was adopted by a S2S guest instructor who had visited her throughout her time in the purrogram.



Stuart Little

Stuart arrived at S2S scared and barely able to walk, dragging one leg behind him. His rehabilitation process at S2S didn't take long, due to his enthusiasm, energy, and patience with teeny tiny physical therapy. The Uncles took over strength training, gently scaffolding both Stuart's courage and his muscle development. He gradu-catted with completely intact physical abilities, and found a forever home with another singleton from Small Miracles.





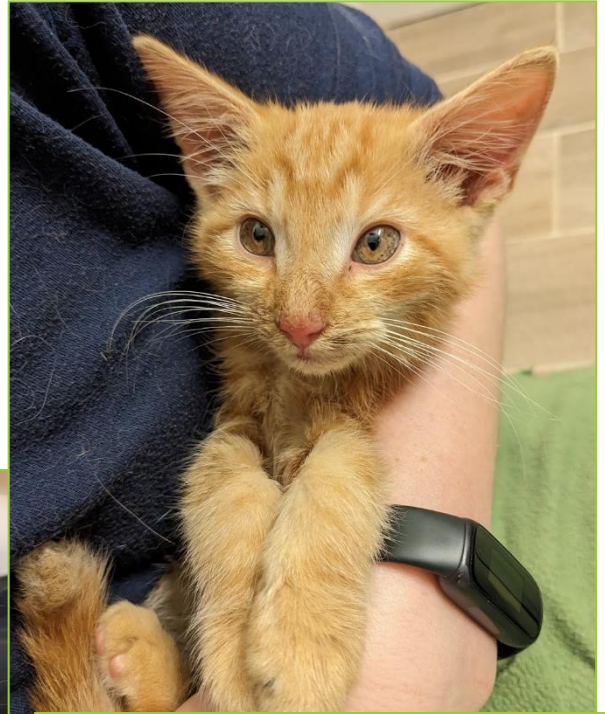
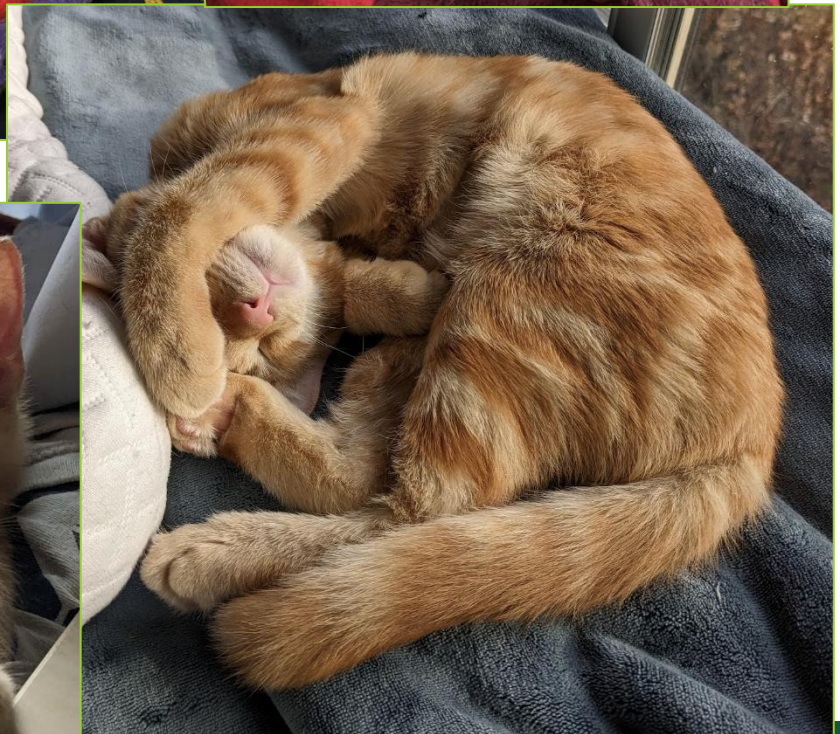
Cinderella

Cinderella was found (and named) by a small child in a local park. She arrived weighing as much as two rolls of nickels and fearing absolutely nothing. Cindy's outsized personality charmed her instructors, just as her plump belly reassured them that she was thriving. Her chaotic good energy captured the heart of her adopter, who dubbed her Princess Wrecking Ball.



Oliver

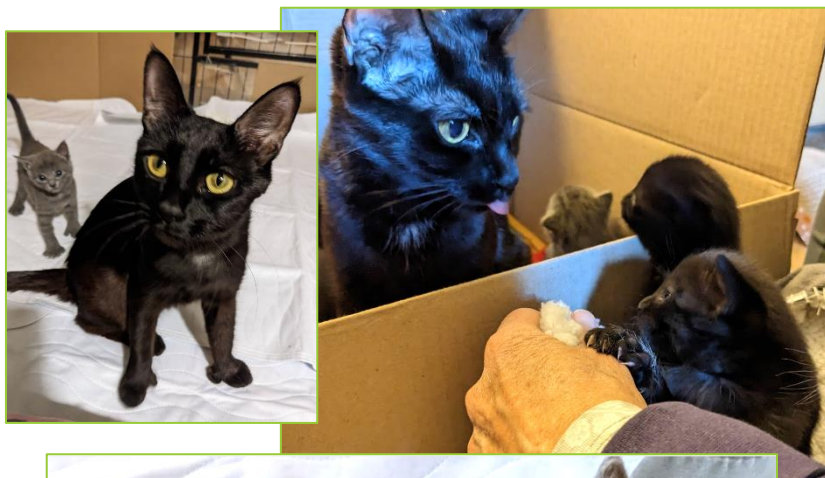
The S2S Chief Infurrmation Officer found Oliver by the side of the road, exhausted and starving, desperately trying to eat roadkill. After undergoing intensive care at S2S and extensive study time with our Meowntoring team, he blossomed into an incredibly good-natured, loving, friendly, and VERY orange graducat.





Polly and the Kittens with Mittens

Polly arrived, exhausted and thin, with five one-week-old kittens and a huge pair of mittens! She passed on her polydactyl genes (and resulting bonus toes), to Doritoe, Tositoe, Pepitoe, Tiptoe, and Tic-tac-toe. Under Polly's extremely diligent care, the Kittens with Mittens grew into sweet, snowshoed friends with a penchant for exploration and a strong drive to cuddle.



Please note that the Smol2Swol Photography Dept. does not use generative technology in our images. All kittens pictured are exactly as cute as they appear, even those with a suspicious quantity of toes.

Not biting yet on Gener-eat-ive AI

2024 saw tremendous advances in artificial intelligence algorithms, particularly those that can generate novel text and imagery. S2S community members who view images of Acorn of the Forest class (right) or Chip of the Ballgame Snacks (below right) can't be blamed for concluding that these kittens are too adorable to be real.

However, S2S has a strict policy against using gener-eat-ive AI purrograms, such as CatGPT, GPT-Furr, and KitJourney, in our public-cat-ions. Feline applications of these technologies carry significant safety implications that must be evaluated by our staff, especially the risk of a dangerous conditions called "cute overload".

What's in a name?

Here at Smol2Swol, we expect more from our names than Shakespurr did in *Romeow and Julie-eat*. An S2S class name theme should be compelling, memorable, and inspire community engagement that helps to spread the word about our students to pawtential adopters.

*"That which we call
a kitten by any
other name would
be just as sweet."*

The responsibility of selecting names rests with the prestigious Student Name Assignment Committee (SNAC). Over the first days or weeks that a class resides with S2S, the SNAC carefully observes the characteristics of the students and, if present, their class leader, as well as co-occurring world events. The SNAC's purrlimentary pawcedures ensure that candidate themes fulfill several key criteria:

- Names must be recognizable to the layperson - no jargon.
- Class leader names should not be another exemplar from the category of student names, but rather should be in some kind of oversight, containment, or umbrella role relative to them. For example, Halloween led the Candies class, while Sunny led the Planets.
- Bonus points if the class leader's name lends itself to a nickname when she is up for adoption by herself (after the students are adopted). For example, Halloween preferred to be addressed as Hallie after her kittens graduated, as Camden went by Cammy, and Patissiere went by Patty.
- Names should be cute, though admittedly this criterion can be very subjective.



*If we **were** to make use of such technologies, we would certainly re-tune the 'fluff' and 'potato' purrameters in this meowdel to be a little less ridiculous.*



Catistician's Corner

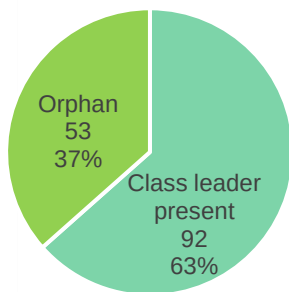
Purrogram at-a-glance

The S2S Stathisitics Dept. now has five FY of data to work with in their ongoing quest to characterize and understand the dynamics of Smol2Swol. A small sampling of analyses are shown below, ranging from the simple (counts of kittens by family type) to the more complex (toebear counts, measured over each type of feetie). Staff were pleased to see that our efforts at diversifying name themes were successful (lower right), and a little surprised to realize that 0% of kittens in 2023 were long-furred (bottom left).

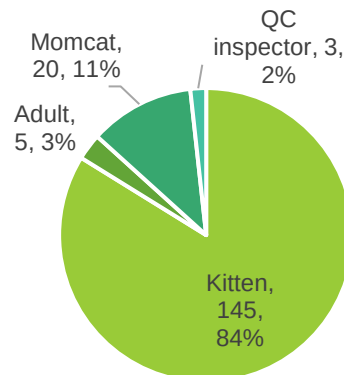


Pictured: Analyticats Team intern, inspecting data.

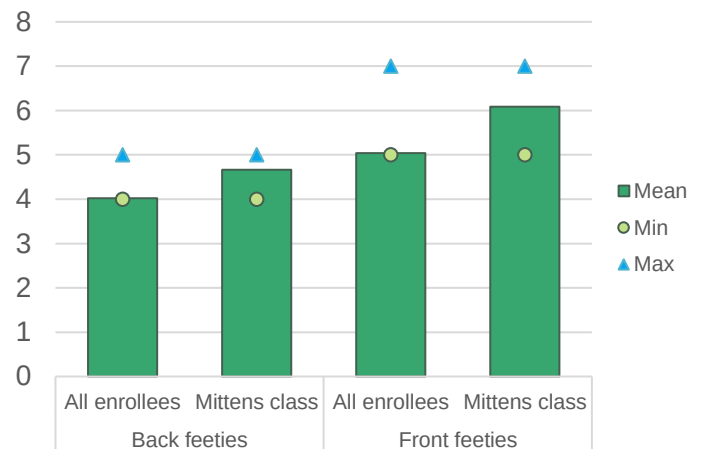
Kittens by family status



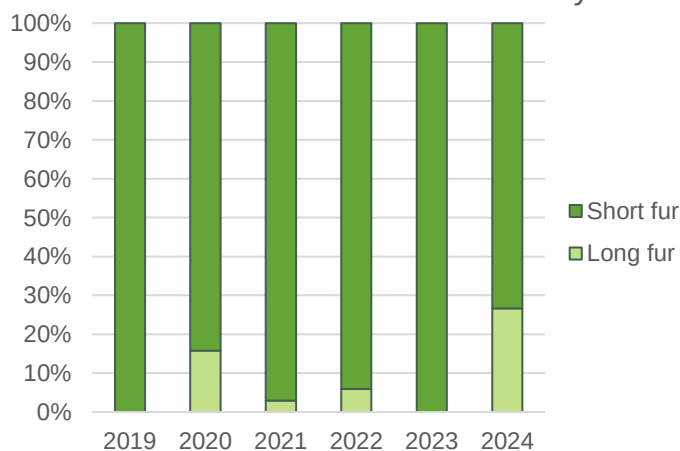
Enrollees by role



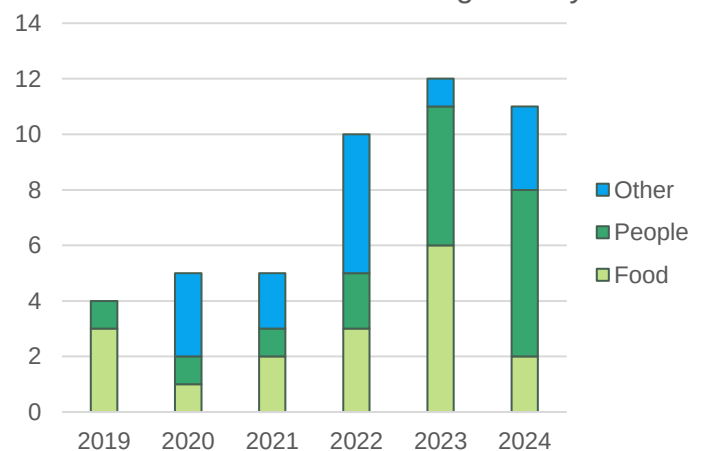
Toebean counts



Enrollee Fluffiness Distribution by FY



Class Name Theme categories by FY





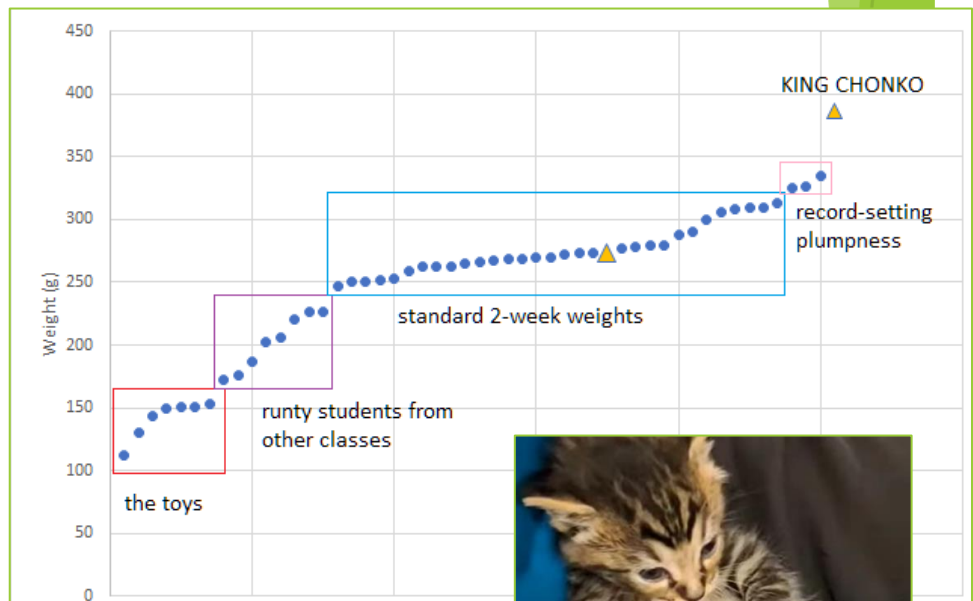
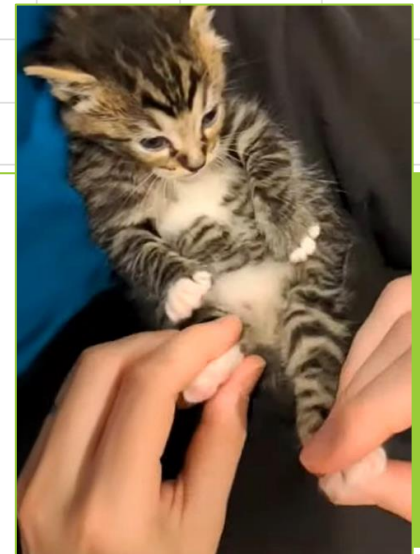
Meowdical Mysteries

Solved: Swimmer's Syndrome

The S2S Statistics Department tracks and plots daily weights of students over time to ensure that students consistently gain weight. Camden opted out of this daily service, but allowed occasional single-timepoint meowsurements of Cheese Puff and Cracker Jack, her

smolest and swolest Snacks, respectively. Their weights at 13 days old are plotted below in yellow triangles, alongside every other kitten with a weight recorded at 13 days old, sorted by weight and annotated. Cracker Jack – dubbed King Chonko in light of this analysis - was head and shoulders (and belly!) above every other student in S2S history. His smolest sibling was still near the upper end of the distribution, so we did not immediately suspect anything was amiss – merely that Camden was very diligent about feeding her students, and that Cracker Jack had boarded the freight variant of the Gain Train.

However, Cracker Jack was not as mobile as his siblings, and by three weeks old it was clear that his back legs splayed out to the sides while his siblings' legs stayed underneath them. This condition is called Swimmer's Syndrome; it is not well understood, but it may be caused by inadequate development of muscles or ligaments in the legs. Diagnosis may be delayed because very young kittens often 'swim' while they are learning to use their legs for effective locomeowtion.



As with most feline ailments, early detection and decisive action are key to ensuring pawisitive outcomes. After a visit to the Small Miracles veterinary team, S2S began tiny physical therapy with the King to encourage proper development of his muscles and ligaments. After only a few days of spin class (shown at right) in the Fuzziotherapy Annex of the new Feline Purrformeowance Center, Cracker Jack began to get his legs under him! He recovered completely in a few short weeks and graducatted with full mobility.

Claw Care

Clip your kitten's claws regularly, using clippers made for cats. It's critical to avoid cutting the "quick", or the blood vessel in the claw: it's very painful for the kitty, and if you accidentally cut the quick you might never get to touch their paws again! We clip off just the very tips of the claws, both to avoid the quick and to ensure that claws must be clipped very frequently, which normalizes the procedure for the kitten.



Cats should **never** be declawed. Declawing is NOT like clipping nails; declawing is equivalent to cutting off your fingertips at the top joint. It causes lifelong suffering to the cat, may result in violent behavioral outbursts, and leaves them without means to defend themselves in an emergency.

Supporting Our Students Feline Purrformeownce Center Grand Opening

S2S keeps up with the latest research on methods and technologies to best support our kittens on their journey to reach the Swole Goal. And the research is clear: intense training must be balanced by an equal emphasis on recovery in order to maximize the health, wellness, and capabilities of our trainees.

In FY24 we added a Fuzziotherapy Annex to our state-of-the-art furrilities (See *Swimmer's Syndrome* article on page 18), and plans are underway to renov-ate the Recovery Wing and staff it with expurrtis in massage therapy.



Top right: the Ballgame Snacks in a team training session, admiring Chip's round-bellied technique.

Above right: Students enthusiastically helping S2S Mousekeeping staff maintain the new flooring.

Above and right: students enjoying ear meowssage and therapeutic purritoing in the Recovery Wing.



Litterature Review

Smol2Swol is an evidence-based organization that strives to adapt its training meowthods to the latest in scientific research, so S2S staff keep up on the latest public-cat-ions to ensure that the purriculum is grounded in the bigger picture of feline studies. Three recent findings are reviewed below.

Spoken word vocabulary acquisition by cats

This pair of studies tested the ability of cats to associate arbitrary images with arbitrary sounds, and found that cats are indeed capable of associating sounds with images – but that they may only care to do so when the sounds are human speech. Furthermore, cats can learn the names of their friend-cats implicitly, without explicit training.

Takagi, S., Koyasu, H., Nagasawa, M. et al. Rapid formation of picture-word association in cats. *Sci Rep* 14, 23091 (2024). <https://doi.org/10.1038/s41598-024-74006-2>

Takagi, S., Saito, A., Arahori, M. et al. Cats learn the names of their friend cats in their daily lives. *Sci Rep* 12, 6155 (2022). <https://doi.org/10.1038/s41598-022-10261-5>

Orangeness unraveled

Two unrelated studies found converging evidence of the genetic mutation that alters activity of the Arhgap36 gene to produce orange coloration in cats - and determines that feline orangeness is unique from orange coloration in other species. As *Science* reports: “cats with the mutation are not only healthy, but also cute.” Neither study determined the impact of Arhgap36 on possession or use of the single orange braincell. Read more at: <https://www.science.org/content/article/gene-behind-orange-fur-cats-found-last> .

In the Mews

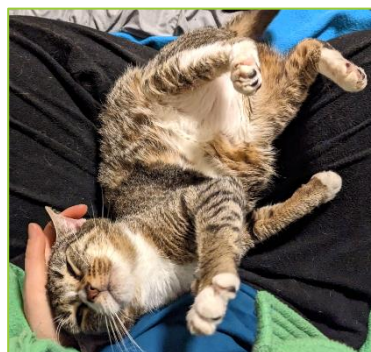
A collaboration between computer scientists, artists, and cats yielded an award-winning study/exhibit on the interaction between robots and cats. Three cats inhabited a ‘cat utopia’ filled with enrichment and governed by a custom robot trained on thousands of cat videos (and monitored by safety personnel). The cats appeared to enjoy interacting with their robot overlord, but ultimately learned how to bend it to their will, surprising no one and assuring all involved that felines will be allies in resisting the robot uprising. Read more at:

<https://arstechnica.com/science/2024/05/cats-playing-with-robots-proves-a-winning-combo-in-novel-art-installation/> .

Schneiders, E. et al. (2024). Designing Multispecies Worlds for Robots, Cats, and Humans. In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems (CHI '24). Association for Computing Machinery, New York, NY, USA, Article 593, 1–16. <https://doi.org/10.1145/3613904.3642115>

Regulatory Compliance

Round Lady Trixie arrived with typical interest in checking out the S2S furrilities and dining accomowdations, but our highly-trained staff were suspicious at her general, rather than centrally concentrated, plumpness. After two FOIA (Feline Obstetric Infurrmation Access) requests, she came clean as QC inspector: not actually pregnant, just round and extremely friendly.



While QC inspection is all part of the process, the success of undercover investigators highlights the importance of being vigilant against even the friendliest sources of hissinformation.

Where are they meow?

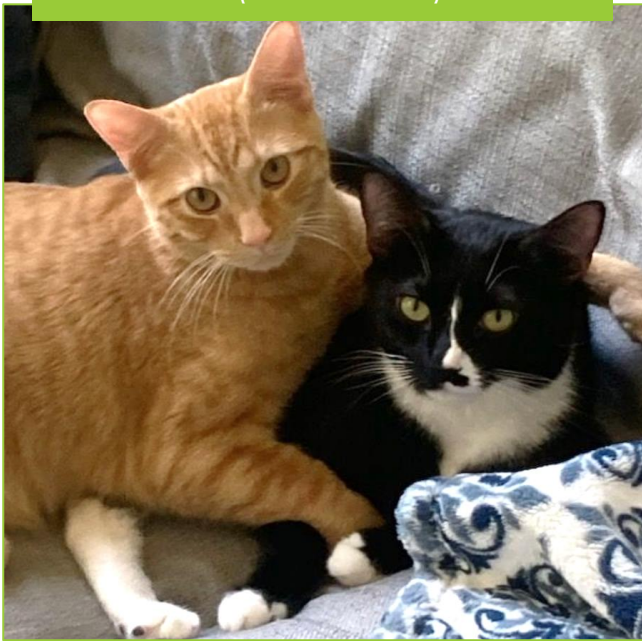
Smol2Swol staff are always impressed by how diligently our adopters work to ensure smooth introductions, and then to support ongoing relationships, between their kitties. Pictured here are the heartwarming feline friendships in three forever homes.



Ham (Sandwiches, '21) & Charlotte



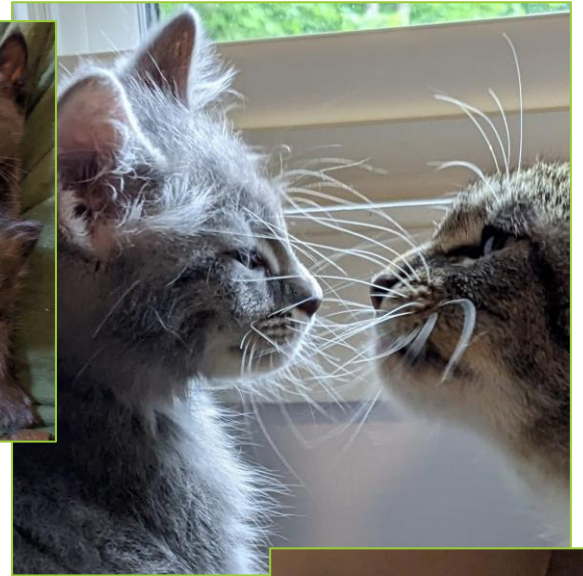
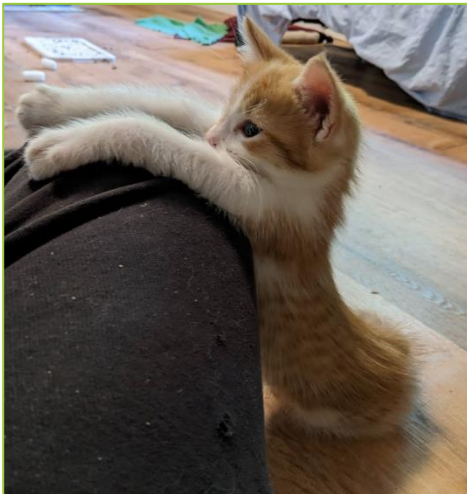
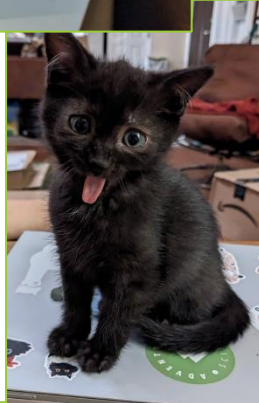
Macchiato (Coffees, '20) & Miausi



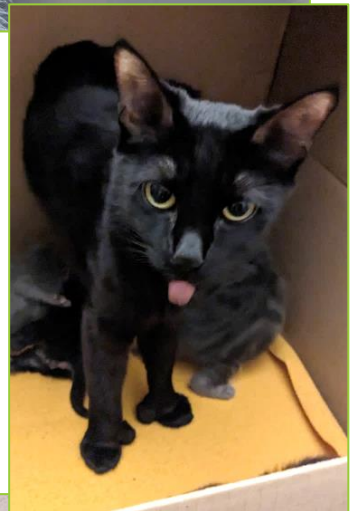
Cory (Dances, '22) & Clara Bow (Silent Film Stars, '23)



Candid Catmera



All parties involved in training at S2S take it very seriously, from our Meowntors to our guest instructors. But we also embody the old saying: work hard, play hard! Here we showcase some of the lighter moments in our students' lives as they journey from Smol to Swol.





A meowssage from our Nommunications Director

As poet Robert Southey wrote, *“A kitten is in the animal world what a rosebud is in the garden.”* S2S interprets such verse thusly: kittens, like rosebuds, serve as the purrfect justapawsition of beauty and danger. Much like the roses’ thorn, the kittens teeth, claws, and generalized catpakitcity for omnimurder make them both alluring and frightoening. We embrace these dikittummies at S2S and encourage our students to be pawthentic, which requires simeowltaneously being adorable and deadly within the confines of a domestikittened existence. Kittens and rosebuds are signs of new life, something difficult to comprehend at the end of a smolstice-swolstice transition when the nights are long and the days are cold. Nevertheless, we encourage our readers to focus on the pawsitive and express both gratitude and humility as we embark on our sixth Feline Year. We are grateful for and humbled by your continued support of S2S, thank you. Our Preditorial Staff wish you and yours a happy and healthy Swolstice.

HAPPY SWOLIDAYS!