BEYOND THE CLINIC

The Veterinary Care Shortage for Backyard Chickens

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Like many, I adopted my first chickens during the COVID-19 pandemic. I've since had experience with predation (by a fox and a raccoon) and attempted predation (by an ambitious black rat snake). However, my chicken-keeping journey has been a joy overall, with a traumatic exception.

On a Thursday in July of 2024, I discovered that my backyard creek had flooded overnight. I usually evacuate the chickens to the garage during storms, but this storm was a surprise. Five of the chickens were fine, but my Delaware chicken, Della, was soaking wet. On closer examination, she had a gash in her right leg and clearly needed stitches.

I proceeded to call 6 veterinary practices in 3 states before I found an opening. Basin Run Animal Hospital in Colora, Maryland (an approximately 40-minute drive from my house), could see Della that day. Mary Denver, DVM, examined Della and thought that she could repair the tear, which did not involve the muscle. However, Dr. Denver did say that many chicken owners in this situation would opt for euthanasia.

ULTIMATELY, FUTILE CARE

I was previously unfamiliar with the concept of futile care—providing continued or new treatment without the reasonable expectation of improving a patient's condition.[1] But despite the severity of Della's wound, I do not regret authorizing her surgery. I knew Della was at least 4 years old, but she was still laying eggs, and I was not prepared to give up on her.

There are 2 questions to consider in defining care as futile.[1] The first refers to the outcomes of the last 100 cases, which didn't apply due to the novelty of avian surgery. The second question is whether the intervention would lead to dependence on specialized medical care, which would not be the case for Della. I left her at Basin Run for the repair. Everyone was enthusiastic about the rare chance to operate on a chicken, despite the risk of anesthesia.[2,3]

Della's surgery was a success. Dr. Denver showed me how to provide postoperative care and medicine, as well as how to feed her liquid food if she wouldn't eat on her own. I kept Della isolated in a bin with clean bedding and followed Dr. Denver's instructions. Della initially was able to hop around and eat on her own, but she declined over the weekend.

On the following Monday morning, Della had a seizure and died. I believe she contracted an infection from the floodwaters that the antibiotic couldn't overcome. Dr. Denver had limited prescription options due to

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current U.S. FDA regulations.[4] I took Della to the backyard so her chicken sisters could say goodbye, and I buried her behind their enclosure. My hope is that this article outlining Della's story will lead to backyard chickens' increased access to veterinary care.

THE INCREASING POPULARITY OF CHICKENS AS PETS

Today, 13% of all households in the United States keep chickens.[5] The reasons for their growing popularity are numerous, including the desire for sustainable and resilient food systems, access to fresh eggs, and emotional support and companionship. Although the upfront infrastructure costs mean that the eggs aren't cheap, backyard chicken owners, including myself, enjoy eating them. Backyard chickens are also fun and relaxing to watch. When you spend time with them, it isn't hard to imagine a chicken's dinosaur ancestors.[6] They also eat ticks,[7] which makes them especially valuable in areas with high rates of Lyme disease. Additionally, chickens are effective predators of spotted lanternflies[8] and emerald ash borers.[9]

Backyard chicken owners are increasingly willing to invest in their care, too. Published stories on backyard chickens range from accounts that acknowledge their complicated status as part pet and part livestock[10] to the exceptional measures taken to provide them with medical care.[11] Unfortunately, the demand for backyard chicken veterinary care is oftentimes not met.

THE BACKYARD CHICKEN VETERINARY CARE GAP

There are several factors that make access to poultry veterinarians in the United States an urgent issue. First is the sheer lack of them. There are 692 practices listed in the latest directory of chicken veterinarians, with the highest number—84—in California.[12] Half of all states have fewer than 10. A second issue is that in 2017, the FDA banned the over-the-counter sale of medications for chickens,[4] requiring a prescription and intending to curb antibiotic resistance in livestock. Getting a prescription for medicines used in the routine care of pet chickens requires an existing relationship with a veterinarian. The scarcity of such veterinarians makes these relationships difficult to cultivate.

Private practice poultry veterinarians are rare. Avian anatomy is quite different from that of mammals. Avian systems can be harder to master, and pain in birds is poorly understood.[13] In small animal practice, it could be months between chicken visits, although numbers of chicken patients are increasing.[14] These factors tend to limit the numbers of small animal veterinarians with poultry experience.

Commercial poultry veterinarians make more money for easier work than small animal private practice.[15] Commercial veterinarians often treat the entire flock for common problems and cull sick birds.[16] Dr. Denver, who treated Della, gained experience with birds during a residency in zoo medicine at the University of California, Davis, and subsequently at the Maryland and El Paso zoos. "Vet school provided little information on poultry," Dr. Denver explained, adding that there is a substantial difference in poultry medicine for large commercial flocks versus backyard birds. "Backyard flock owners tend to be concerned with the health of individual birds and are willing to treat those individuals, up to a point," she said.

Owners willing to treat their chickens run into their own knowledge gaps. Public education around how to participate safely or responsibly in chicken keeping is lacking. This has led to increased rates of *Salmonella* infections from backyard flocks.[17] Many chicken keepers may be unaware of proper sanitation techniques.[18,19] Awareness of their flock's vulnerability to avian influenza may also be inadequate.

The lack of information and availability of misinformation encompass more mundane issues too. An electrician I hired had kept chickens in Sussex County, Delaware, but he couldn't keep the population under control. He was unaware that roosters are not necessary for egg production. Judging from the number of questions in online chicken forums about the need for roosters, such as the Subreddit r/BackyardChickens, this is a common misconception. The shortage of reliable information around chicken care is another reason for the need for increased engagement from veterinarians.

CURRENT EFFORTS AND SOLUTIONS

In 2022, I attended a 2-hour training class for small flock owners on prevention of highly pathogenic avian influenza (HPAI), which was funded by the Maryland and Delaware state departments of agriculture. Brian Ladman, PhD, senior scientist in poultry research at the University of Delaware's Avian Biosciences Center,

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Behavioral: Hyperactivity, behavioral changes, anxiety, vocalization, aggression, inappropriate urination, disorientation
Neurologic: Muscle tremor, convulsion, ataxia, paresis
Respiratory: Tachypnea, dyspnea, cough
Urologic: Polyuria, urine abnormalities (hematuria, urinary tract infection, proteinuria, glucosuria, decreased urine concentration), urinary incontinence, cystitis, renal failure, renal insufficiency
Immune: Urticaria, anaphylaxis, allergic edema
Blood and lymphatic: Lymphadenopathy, anemia, hypoalbuminemia, leukopenia
Hepatic: Elevated Liver Enzymes, hepatopathy, hepatomegaly, hepatitis
Musculoskeletal: Lameness, limb weakness, myositis
Ear and labyrinth: Otitis externa
Cardio-vascular: Tachycardia
Endocrine: Diabetes mellitus, hyperglycemia
In some cases, death/euthanasia has been reported as an outcome of the adverse events listed above. Neoplasms have been reported in dogs taking cyclosporine, including reports of lymphoma/ lymphosarcoma and mast cell tumor. It is unknown if these were preexisting or developed de novo while on cyclosporine. Diabetes mellitus has been reported; West Highland White Terriers are the most frequently reported breed.
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CLIENT HANDOUT
This handout outlines resources available to clients who keep chickens, whether your practice provides care for chickens or not.

said this program was a part of an ongoing initiative to increase veterinarian engagement in small flock medicine. "Not only to support the hobbyist community," Dr. Ladman said, "but also to raise awareness of reportable diseases like avian influenza."

The USDA has historically funded the National Animal Disease Preparedness and Response Program,[20] which provided money for small flock training for local veterinarians in both Maryland and Delaware. Other programs may exist in localities across the country. See **BOX 1** for additional training opportunities and resources.

IN SUMMARY

As a backyard chicken owner who has experienced the shortage of care firsthand, I hope that many more small animal veterinarians will seek out training in avian care and offer resources to clients at their practices. Backyard chickens are entertaining animals that contribute to resilient food systems. Small animal

BOX 1 Resources and Online Education for Backyard Chicken Veterinary Care

Resources

- **NAVC Media** Poultry in General Practice: Veterinary Medicine for Chickens in Small Flocks
  go.navc.com/40qSbsP
- **AVMA** Backyard Chickens 101
  go.navc.com/4hlOXvy
- **The Virtual Chicken** YouTube channel go.navc.com/41CfRcT
- **Merck Veterinary Manual** Common Infectious Diseases in Backyard Poultry
  go.navc.com/4bG2BZe

Online Education

- **Association of Avian Veterinarians** Backyard Poultry: Practical Information You Can Use, Presented by Systems
  go.navc.com/3DgcYqg
- **American Association of Avian Pathologists** Poultry Medicine Course for Veterinarians in Private Practice
  go.navc.com/3R0KmnO
- **University of Nottingham** Poultry Health
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veterinarians can increase awareness of the benefits of avian husbandry and acceptance of chickens as pets. Chicken owners are accustomed to treating their birds as pets, and they deserve access to quality, affordable care. TVP

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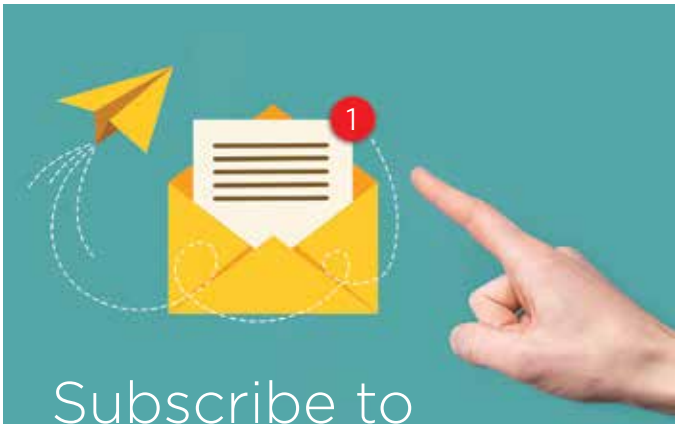
Rebecca (Becky) has a degree in geology from Colgate University. Becky is a scientific copywriter at CSols Inc., the premier laboratory informatics solutions provider in North America. She writes marketing materials such as blog posts, case studies, and white papers. Additionally, she runs her own editing and writing business, White Clay Editorial, where she writes blog posts for the American Ceramic Society's Ceramic Tech Today and edits academic journal manuscripts for non-native speakers of English. She lives in Newark, Delaware, with her chickens and cats. In her spare time, she enjoys reading, traveling, hiking, cooking, woodworking, and completing jigsaw and crossword puzzles.



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