

# 2018 in Review

2018 was a record-breaking year with a total of 2,195 patients admitted – a 20% increase from last year! This includes patients of over 130 different species, each with their own unique needs. Approximately half of these patients were wild babies that had been injured or orphaned while the other half consisted of sick or injured adult animals.

Similar to previous years, 48% of our patients were mammals and 42% were birds (See Figure 1). This year's increase in reptiles and amphibians (up from 8% to 9% of the patient total) is a more significant increase than the 1% change implies! Since moving into our new hospital facility, aquatic turtle species have increased dramatically. We saw a 225% increase in Eastern Painted Turtles and a 280% increase in Common Snapping Turtles! Our amphibian patient load has also tripled in that short time (though amphibians are still an incredibly small percentage of our total intakes). These reptile and amphibian increases may be due to increased rainfall in 2018 or simply due to increased awareness that wildlife hospitals like ours can treat these patients.

The first 24 hours are the most critical for any patient. Animals that are determined to have a poor prognosis on intake are euthanized to limit suffering. Others

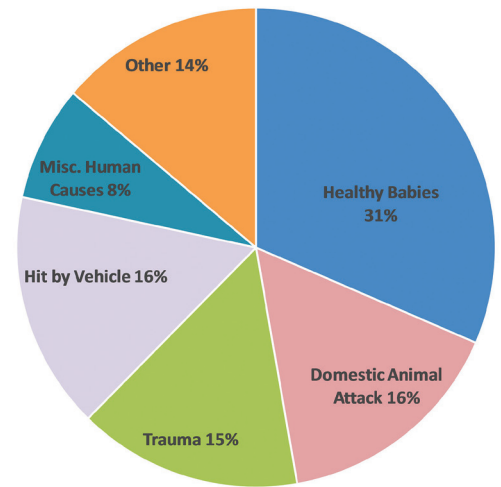
die in the first 24 hours despite our best efforts. This year, those that lived through the first 24 hours at the Center had a survival rate of over 70%!

## The Role of Humans (*Homo sapiens*)

Some people believe that no one should help wildlife; let nature take its course. Unfortunately, animals have not been able to adapt and evolve quickly enough to some of the rapid industrial changes made by humans. Cars were never a natural predator with which wildlife had time to evolve. Nor were windows. Nor pesticides. Nor the construction of new subdivisions that comes with the destruction of innumerable wild homes. BRWC treats these animals in part to mitigate the negative and unfair effects of humans.

Every patient that comes into care is given an official diagnosis (see Figure 2). Some are very clear (eg. Hit by vehicle) while others have multiple, more specific causes listed under one heading. For example, "Miscellaneous human causes" includes getting stuck in fences, glue traps, and garden netting, as well as accidentally disturbed hibernation, cutting down trees, lawnmower injuries, or other landscaping-related problems. "Trauma" is the diagnosis we use for traumatic injuries of an unknown cause. In most cases, these are

Figure 2 – Diagnoses



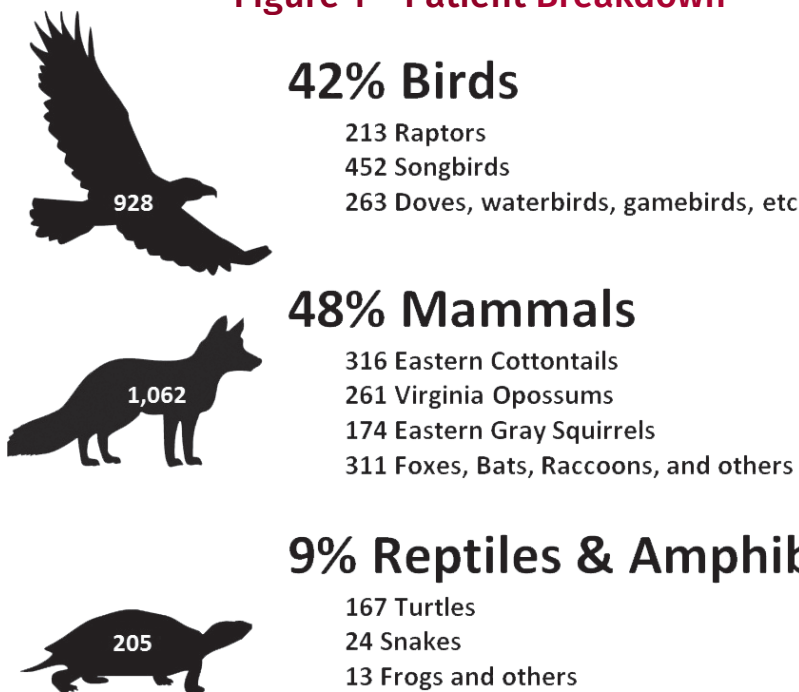
suspected vehicle collisions or domestic cat attacks that were not physically witnessed.

It should be noted that an estimated 95% of our patients come into care for human-caused reasons, either directly or indirectly. Most people would agree that vehicle collisions, entrapments in fencing or netting, gunshots, glue traps, lead and rodenticide toxicities, etc. would not be a problem if humans were not in the picture. Other diagnoses are more debatable.

Our Center (and most wildlife professionals) fully accept that domestic cat attacks are a human-caused issue. The domestic cat (*Felis catus*) is an introduced, non-native species whether living in the home, outdoors, or as part of a feral colony. These cats are a single species, just as all domestic dogs are of one species (*Canis lupus familiaris*). Humans have spread these domestic cats across our continent creating feral populations, and humans continue to allow cats unsupervised outdoor access or abandon their pets outside when they are no longer able to care for them. No one blames domestic cats for acting on their natural instincts in this situation. For these reasons, we believe firmly that cat attacks on wildlife are a human-caused problem.

Humans are present but a bit less direct in some diagnoses, such as aural abscesses in turtles. This seemingly natural condition is thought to be caused in part by lack of available vitamin A, a vitamin whose metabolism and utilization in turtles is disrupted by organochlorine pesticides.

Figure 1 – Patient Breakdown



These pesticides are in the environment because of humans. For those that are not directly human-caused, many are exacerbated by humans. For example, mange is a parasite found in nature. However, when humans encroach on wildlife habitat or worse, leave food out for wildlife, these wild populations become more dense. When animal populations are denser and more interactions occur, diseases like mange (and rabies and distemper) can spread more easily.

In Figure 2, "Other" includes diagnoses such as infectious and non-infectious diseases, window strikes, intentional human attacks, native predator attacks, and abductions of healthy babies. We always recommend that you call the Center before bringing in any animal. In many cases, the baby you think needs help is actually doing fine on its own! Nearly 6% of our cases this year were abductions and luckily, we were able to successfully reneest most of these.

### By the Numbers

This year our veterinarian performed 120 surgeries including many orthopedic procedures on raptors, numerous turtle fractures, and seemingly endless laceration repairs. In addition to hundreds of in-house blood tests, fecal exams, and dozens of lead tests, we've sent out numerous samples for advanced diagnostic testing so that we can provide our patients with the highest quality of care. We've taken over 400 radiographs and performed over 100 necropsies for diagnostic and teaching purposes. It's been a busy year in the Center and our licensed veterinary technician, Cara Masullo, who joined our team in April, has been



American Toad soaking in betadine solution to help keep its cat attack wounds clean. Sutures are visible on this toad's back. Photo by Dr. Jen Riley.

critical to our continued hospital growth!

Since moving to our full-service licensed veterinary hospital in 2016, our volunteer workforce has TRIPLED! We have multiple volunteers daily that assist our staff with the enormous amount of work that goes into running a hospital, rehabilitation center, and education program.

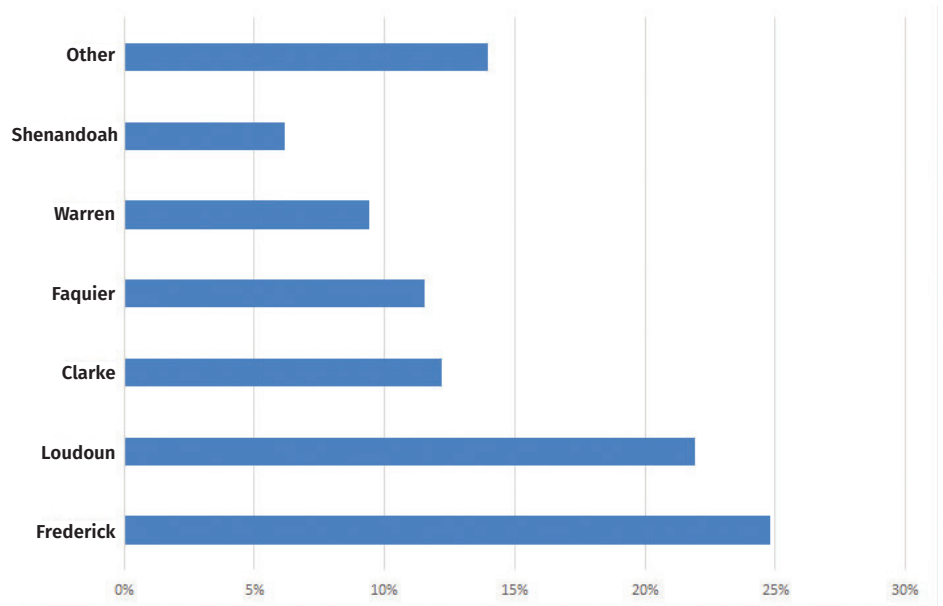
This year we have helped train four licensed veterinarians, five veterinary stu-

dents, four conservation biology students from the Smithsonian Conservation Biology Institute, and 18 rehabilitation interns! We also taught over 70 children to love and appreciate these animals at our Wildlife Discovery Camp this summer.

It's been a busy year, but we've accomplished a lot! Thank you to all of our supporters who make this important work possible. ■

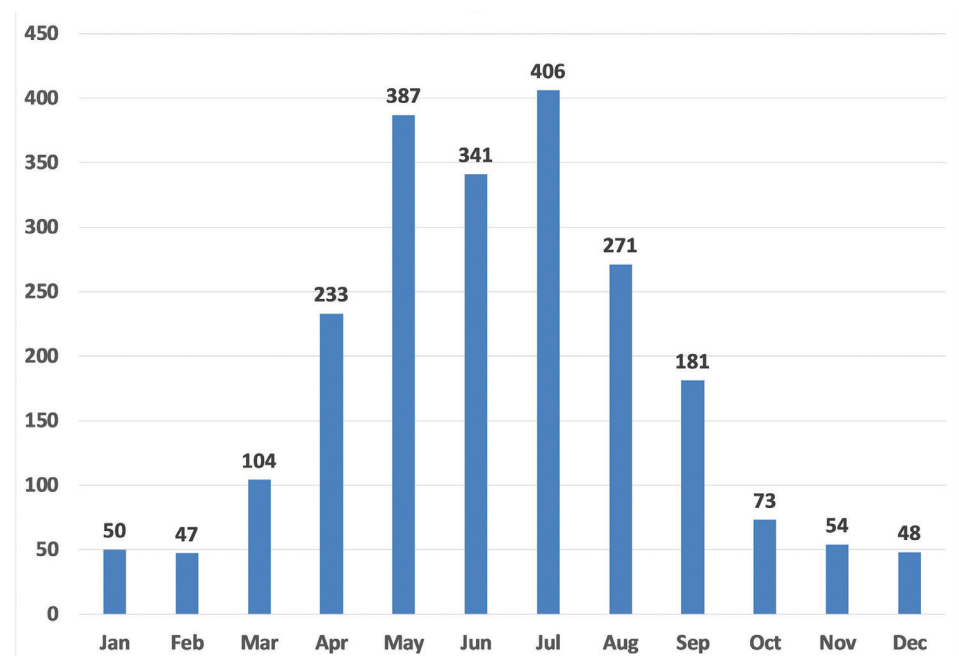
### Figure 4 – Patient Intakes by County

The majority of our patients come from nearby counties including Frederick, Loudoun, Clarke, and Fauquier. Though most come from nearby, we are also the closest wildlife hospital for many other areas! 14% of our patients come from counties listed as "other". This section includes places like Prince William, Arlington, and Stafford counties, but also counties as far away as Roanoke, Bland, Chesterfield, King William, and many others.



### Figure 3 – 2018 Monthly Patient Intakes

As you can see, we receive the majority of our cases in the Spring and Summer due to the large number of babies.



# 2018 Patient Details

2,195 patients, 130 species \*Domestic animals are not intentionally admitted and are not released to the wild.

SPECIES	COUNT	SPECIES	COUNT	SPECIES	COUNT
<b>AMPHIBIA</b>	<b>10</b>	Eastern Screech Owl	23	<b>MAMMALIA</b>	<b>1062</b>
American Toad	7	Eastern Wood Pewee	1	American Beaver	2
Pickerel Frog	2	European Starling	42	Big Brown Bat	31
Spring Peeper	1	Fish Crow	10	Bobcat	1
		Gray Catbird	7	Coyote	1
<b>AVES</b>	<b>928</b>	Great Blue Heron	2	Domestic Rabbit*	5
American Crow	24	Great Crested Flycatcher	1	Eastern Chipmunk	9
American Goldfinch	14	Great Horned Owl	16	Eastern Cottontail	316
American Kestrel	5	Green Heron	1	Eastern Fox Squirrel	6
American Robin	40	Hermit Thrush	6	Eastern Gray Squirrel	174
American Woodcock	5	House Finch	35	Eastern Red Bat	4
Bald Eagle	2	House Sparrow	54	Evening Bat	1
Barn owl	3	House Wren	2	Gray Fox	9
Barn Swallow	6	Indigo Bunting	1	Groundhog	31
Barred Owl	30	Killdeer	1	House Mouse	22
Belted Kingfisher	3	Mallard	27	Mallard	3
Black Vulture	8	Merlin	1	Meadow Vole	2
Black-capped Chickadee	3	Mourning Dove	52	Northern Long-eared Bat	2
Blue Jay	15	Northern Cardinal	24	Northern Raccoon	75
Bobwhite Quail	1	Northern Flicker	6	Red Fox	23
Broad-winged Hawk	8	Northern Mockingbird	10	Silver-haired Bat	1
Brown Creeper	1	Osprey	3	Southern Flying Squirrel	6
Brown Thrasher	1	Peregrine Falcon	1	Striped Skunk	22
Brown-headed Cowbird	9	Pied-billed Grebe	1	Virginia Opossum	261
Cackling Goose	2	Pileated Woodpecker	2	White-footed Mouse	49
Canada Goose	23	Purple Finch	1	White-tailed Deer	6
Canvasback	1	Purple Martin	4		
Carolina Wren	71	Red-bellied Woodpecker	12	<b>REPTILIA</b>	<b>195</b>
Cedar Waxwing	6	Red-eyed Vireo	1	Black Rat Snake	18
Chestnut-sided Warbler	1	Red-headed Woodpecker	2	Common Snapping Turtle	23
Chimney Swift	64	Red-shouldered Hawk	44	Copperhead	1
Chipping Sparrow	5	Red-tailed Hawk	40	Corn Snake	2
Common Grackle	11	Red-winged Blackbird	3	Eastern Box Turtle	111
Common Loon	3	Rose-breasted Grosbeak	1	Eastern Milk Snake	1
Common Merganser	1	Ruby-throated Hummingbird	5	Eastern Musk Turtle	1
Common Nighthawk	4	Ruddy Duck	1	Eastern Painted Turtle	26
Common Pigeon	12	Scarlet Tanager	2	Five-lined Skink	2
Common Raven	5	Sharp-shinned Hawk	2	Northern Red-bellied Cooter	1
Common Yellowthroat	1	Song Sparrow	2	Northern Water Snake	1
Cooper's Hawk	16	Tree Swallow	1	Red-eared Slider	4
Dark-eyed Junco	1	Tufted Titmouse	5	Ring-necked Snake	2
Domestic Duck*	4	Turkey Vulture	14	Wood Turtle	2
Double-crested Cormorant	2	Unidentified Bird	3		
Downy Woodpecker	5	White-breasted Nuthatch	5	<b>TOTAL PATIENTS</b>	<b>2,195</b>
Eastern Bluebird	10	Wild Turkey	11		
Eastern Kingbird	1	Wood Duck	1		
Eastern Phoebe	9	Yellow-billed Cuckoo	3		