What? We Have a Wildlife Subcommittee?

The Animals Services Committee HAS a wildlife subcommittee.

Current members are:
Maggie Brasted, Director of Urban Wildlife Conflict Resolution of The Humane Society of the United States, subcommittee Chair
Sue Farinato, Volunteer Wildlife Rehabilitator
Lee Prouty, Volunteer Wildlife Rehabilitator
Kimberly Sisco, Volunteer for Northern Virginia WRL Wildlife Hotline

The Wildlife subcommittee was assigned to investigate public demand for wildlife-related information and assistance. Today we are bringing you the first draft of a White Paper on this topic.

What Has the Wildlife Subcommittee Been Doing All This Time?

1. Conducted a survey of all public and private entities we could identify who we believed got calls from the public about common wildlife concerns and problems.

2. Compiled the information from the returned surveys and interpreted it.

3. Researched the issue of public demand for information and assistance with wildlife concerns more broadly and summarized.

4. Researched how other communities have approached the issue.

5. Developed preliminary recommendations for the Animal Services Committee to consider to address negative impacts from public demand for wildlife-related concerns on MWCOG jurisdictions' agencies, private organizations, businesses, and individuals.

Highlights of Findings from Survey

Survey went to ACOs, police, wildlife rehabbers, NWCOs, health departments, and a few other animal organizations (i.e. The HSUS, the Fund for Animals).

65 surveys were returned; 32% response rate.

Respondents were grouped into 6 categories:

Animal Care and Control Agencies and/or Sheltering Organization—10 responded

Wildlife Rehabilitators—23 responded

Nuisance Wildlife Control Operators (NWCO)—15 responded

Police—6 responded

Other Governmental Agencies (health dept, USDA Wildlife Services)—6 responded

Other Organizations (The HSUS, the Fund, GeesePeace)—5 responded

How Much Volume of Demand?

All respondents who answered (60) reported nearly 141,000 calls for wildlife concerns a year altogether.

The ACO/Shelter category reported the largest volume of calls per respondent.

The wildlife rehabber category reported the second largest volume of calls per respondent.

Other government agencies and police categories also reported significant volume of calls per respondent.

NWCOs reported the least volume of calls per respondent.

Survey confirmed that there is large public demand for information and assistance with wildlife concerns. Currently this demand is falling unevenly on a patchwork of public and private entities with varying mission and resources.

What Does the Public Want to Know?

Most common type of concern reported: Animal in yard.
Second most common type of concern reported: Injured animal.

Least common type of concern reported: Animal behaving strangely

(Other concerns asked about: Animal in chimney, basement, attic, etc and Babies that seem to be without mother)

Public tends to direct different concerns to different categories EXCEPT they turn to ACO/Shelters for all concerns.

Most common animals public wants info or help with are:

1st—Birds other than waterfowl
2nd—Raccoons
3rd—Squirrels
4th—Groundhogs
5th—Reptiles including snakes
6th—Waterfowl including geese

Most demand is for animals that are common in Metro DC area.

How are Respondents Responding to Demand?

Typical responses closely mirror each category's mission and typical activities.

ACO/Shelters most frequently report they dispatch to the site.

Rehabber educate callers more than any other category and even more than they take animals into care or refer calls.

NWCOs report most often trapping animals, especially when the concern is an animal in yard or in buildings, and next most often refer calls to others.

Other Governmental Agencies primarily refer calls to others.

Typical responses reported were generally appropriate for the nature of the concern asked about.

Referring calls was a common response which may be driving up the overall volume of calls reported.

What Happens to the Animals?

Decisions to use lethal vs. non-lethal responses often based on well-accepted legal, regulatory, human health and safety, and humane concerns when this information was forthcoming from respondents.

Nearly all said they tell the public if an animal will be euthanized.

A large minority do not euthanize wild animals themselves, adding demand to other (vets and shelters).

Many ACO/Shelters report euthanizing healthy wild animals for lack of other options.

What's To Be Done?

Draft Recommendations:

1) Data Collecting and Reporting

Collect and report.
Add wildlife data collection and reporting to planned regional data effort
Approach rehabbers and NWCOs to participate

2) Public Agencies' Policies

Review existing policies
Identify best practices
Recommend model policies be adopted

3) Targeted Public Education

Form a public/private partnership to undertake a targeted public education program
Review existing public education efforts and identify best practices
Use PROACTIVE delivery

4) Professional Education

Review existing professional training of ACOs, shelter staff, & police
Identify best practices
Include training of wildlife for ACOs, shelter staff, & police
Work with MD, VA, & DC towards requiring/encouraging NWCO training
Partner with rehabber groups to increase rehabber training

5) Identifying and Fielding Existing Resources

Inventory animal-related resources and make inventory widely available
Research potential innovative uses of resources held by others

6) Regional Wildlife Hotline

Investigate options for hotline services and develop plan to implement
Assist jurisdictions to identify and work with potential hotline contractors

7) Comprehensive Community Animal Services

Investigate options for making wildlife-related services part of local animal care and control

Investigate options for local governments offering wildlife-related services through other agencies or through contractors.

Now What?

Wildlife subcommittee needs full committee's input, reactions, contributions, and ideas to move this to the next draft. Since many of the recommendations involve ACOs activities, we really need some ACO expertise on the subcommittee. Who can help?

Draft needs polished, fleshed out. Supporting material will be in appendices.

MOST IMPORTANT:
What do you think? Where do you want this to go?

Cover/Title Page

Public Demand for Information and Assistance with Wildlife and the Impact that Demand Has on Public and Private Entities in Metropolitan Washington Council of Governments' Jurisdictions.

A White Paper prepared by the Animal Services Committee of the Metropolitan Washington Council of Governments (MWCOG)

First Draft: Submitted to the Animal Services Committee September 6, 2006

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1.0 Executive Summary

"We don't deal with wildlife. We're not supposed to deal with wildlife but the citizens won't let us not do it." (Thomas Koenig, Director, Loudoun County Department of Animal Care and Control)

[Executive Summary is still to be drafted.]

2.0 Introduction

2.1 Wildlife in Urban and Suburban Communities

As long as there have been people, we have lived near and with animals. When we gathered into larger communities and built cities, animals came along with us; taking advantage of the opportunities we provided. One theory suggests cats may have originally domesticated themselves, not the other way around, when they found the best rodent hunting around human settlements where agriculture created food surpluses that had to be stored for the next season. While house cats eventually accepted our invitation to move indoors, perhaps originally extended because we wanted them to control the rodents in the house as well as in the barn, other wild species also found life comfortable and profitable enough around people to continue to live wild lives right outside, and sometimes inside, our homes.

Attention to the wild animals that find homes around ours has increased over the last half century. The first of a number of national conferences for wildlife managers, biologists, and ecologists in the Americas focused on the issues of urban wildlife was held in the late 1960s. Print and broadcast media increasingly carry stories about wild animals in cities and suburbs. Witness the national and international attention Pale Male and his mate Lola, red-tailed hawks who nest on the ledge of a swank New York City high-rise, garnered when building owners removed their nest only to allow it to be rebuilt after public outcry, even installing a custom-designed railing to better contain the nesting material.

2.1.1 Common Species

Everyone is familiar with some of the most common urban and suburb species, or synathropes. Some species have been well known city-dwellers for a long time; pigeons and many other birds, squirrels, and rats. Some have been living near us for a long time but their presence has been less widely recognized and many people are still surprised to find them nearby; foxes, raccoons, ducks, and many snakes. Some have only relatively recently become common in urban and suburban areas; Canada geese, beavers, and coyotes.

Many common urban and suburban species share one important characteristic that makes them successful in these places. They are opportunistic generalists; that is, they are species that are not too fussy about what they eat and where they live (generalists) and they are good at taking advantage of whatever opportunities their environment presents to them (opportunists). In this way, these species are very much like our own. These flexible adaptable species readily find

what they need in urban and suburban environments; often taking advantage of the alterations we have made to the environment and our tendency to leave tasty things (trash, gardens, pet and bird food) laying around and snug den sites (attics, crawlspaces, areas under porches and desk) open.

In contrast, some types of animals are very rare in cities and suburbs. Large animals who require large ranges to find all they need are obvious examples. Species who need very specialized habitats are unlikely to be able to continue in areas where human development activity makes drastic and frequent changes to the environment. Likewise, species who are sensitive to habitat fragmentation, such as many reptiles and amphibians, are unlikely to be able to cope with the patchwork of urban and suburban environments.

It is common to hear that the wild animals living close to our homes are there because we have taken away their habitat by development leaving them nowhere else to go. Development has certainly consumed a vast amount of formerly agricultural and undeveloped land where human alterations were not as complete as the urban and suburban development that replaced it. However, many of the wild species that are most common synathropes are actually more numerous in cities and suburbs than they were in the habitat that existed before development. The ways we alter the land actually increases habitat opportunity for some species. Species that prefer the same types of landscapes we do thrive as we create more of those types of landscapes. Most people think white-tailed deer primarily live in forests; however, they actually prefer the edges of wooded areas where they can use both treed and open areas for specific purposes. Our typical development creates a great deal more of these edges than the land use we replaced. Similarly, Canada geese consider mowed well-tended grass the ideal free buffet and sight lines around this food source, especially open water, the ideal safe refuse from danger. Therefore, when we construct a typical public park with an artificial pond surrounded by open grass, we have also constructed Canada goose nirvana that support larger and larger flocks who thrive in these landscapes.

2.1.2 Common Concerns

For many people, the presence of wild animals around them is a great benefit. People laugh at squirrels' antics, entice songbirds up close with birdfeeders, show their children the fascinating variety of life on earth, and find the world a better place for the knowledge that wildness continues to exist, and even thrive, just outside their doors. However, these same

people will find instances when these same animals cause them concern, raise questions, or create conflict between our species and theirs.

People's concerns about individual wild animals around them mainly fall into a few broad categories:

- concern for an animal they think may be sick, injured, orphaned, or otherwise in need of human assistance or who appears ill and, therefore, may pose a disease risk to people;
- questions about potential for harm to people or property from an unfamiliar animal near homes; and
- conflicts with animals living in or under buildings, getting into trash, damaging landscaping or gardens, and similar situations.

People often use the term "nuisance" for any wild animal they don't specifically want to have around their homes, including animals in the entire range of situations in the second and third of these categories. Therefore, this term, "nuisance," gets applied equally to the healthy fox merely crossing a yard and the odorous skunk denning under a family's deck; equally to foraging visits by crows even though they will not cause West Nile virus disease in humans and the deer eating landscape plants in yards. Unfortunately, this broad-brush term tends to confuse the real conflicts that need some action to resolve with mere fears about the unfamiliar that need education (of the people) so they understand that no action is needed.

2.2 Public Demand for Information and Assistance

When a concern, question, or conflict comes up (but very rarely before), members of the public look for both information about and direct assistance in dealing with wildlife. They demand information, usually first and more frequently, about what to do, who to call, and whether they even need to call anyone. The demand for even the most basic information is very great for most members of the public. Very few people take the time to acquire information about potential conflicts with wildlife or the real potential for human disease from wild animals (generally much smaller than most people think) in advance, just in case it comes up. Instead, almost all such demand is made by people who have little basic information but, in their perception, believe they have very great immediate need of information and, sometimes, direct assistance. Therefore, in addition to information, members of the public not infrequently demand that someone, not usually themselves, take any action they think needs taken from

quickly removing a wild animal from private property to ensuring immediate trauma care for an injured animal.

2.2.1 Who the Public Turns to for Help and What These Sources Offer

People from zoo keepers and urban park rangers to university zoology professors tell stories about people who called them believing that since they know about wild animals they would be the place to turn for help with a specific wild animal situation in a home, yard, or neighborhood. While these sources may know a great deal about caring for captive wild species or about a wild species they study, they rarely have expertise in concerns triggered by free-ranging species or the resources to serve this demand. The lack of one readily identified source for information and assistance leads members of the public to turn to a variety of agencies, organizations, businesses, and individuals when they seek help.

2.2.1.1. Private Businesses, Organizations, and Individuals

When the public open their yellow pages they find businesses, often still called trappers but more and more using the name nuisance wildlife control operators (NWCOs) or simply wildlife control operators (WCOs), who trap and usually remove wild animals for a fee. The fate of removed animals varies but is frequently death in a shelter's euthanization room, by the trapper's hands, or removal from her known home range to another location where she likely doesn't know where to find food, water, and shelter. Trapped animals who are killed or moved may leave dependent young to die from lack of care or, if found alive, create additional demand for help. NWCOs vary greatly in their willingness and ability to provide services beyond trapping such as exclusion to prevent reoccurrences of wildlife problems and education on wild animals so tolerance and prevention will avoid future problems.

Wildlife rehabilitators, mostly volunteers and frequently working out of their homes, are licensed by state wildlife agencies (for mammals and reptiles) and by the U.S. Fish and Wildlife Service (for migratory birds) to provide care to sick, injured, and orphaned wild animals in order to return these animals to wild lives. The public turns to rehabilitators or are referred to one when they need information or help for an animal believed to be sick, injured, or orphaned. Seeing them as helpful and knowledgeable about wild animals, the public also frequently turns to them for help with other types of wildlife concerns. Some rehabilitators encourage the public to ask for help with other concerns to reduce the number of animals brought to rehabilitators for care. Educating can prevent well-intentioned people from removing a young animal with no

parent obviously tending who doesn't need help or trapping and moving a nuisance animal whose young are then left behind and, if found alive, taken to rehabilitation.

Organizations dedicated to animal welfare, including headquarters of national organizations located within WMCOG jurisdictions, also are contacted by members of the public with individual wildlife concerns. These organizations' expertise, resources, and mission emphasis vary as, therefore, their ability to help individuals with specific concerns.

2.2.1.2. Public Agencies and Their Contractors

Every state has an agency with responsibility for wildlife. These agencies' primary mission is to manage populations of wildlife species (not individual or small groups of animals), typically emphasizing species that are hunted, trapped, or fished. This emphasize is hardly surprising since the majority of their funding (70 percent in Maryland, for example) comes from hunting, trapping, and fishing license fees and from federal excise tax on sport hunting equipment and ammunition (Pittman-Robertson Fund money).

State wildlife managers have been characterized as preoccupation with game animals and with the demands of those members of the public who hunt, trap, and fish over those who do not at least since the first national conference to include urban wildlife, the thirty-second North American Wildlife Conference held in 1967. The public associates these agencies with wildlife, a word that is often in their names, and contacts them for information and assistance with all types of wildlife concerns. However, this consumptive-use-focus characterization is still widely held and many state agency actions continues to reinforce it.

State wildlife agencies with authority in WMCOG jurisdictions, the Virginia Department of Game and Inland Fisheries (VDGIF) and Maryland Department of Natural Resources Wildlife and Heritage Service (MDWHS), do not primarily handle individual request for help with wildlife. Maryland WHS directs these calls to the U.S. Department of Agriculture (USDA), Animal Plant Health Inspection Service, Wildlife Services state office. Maryland WHS also lists licensed wildlife rehabilitators and registered NWCOs (whom they call wildlife cooperators) on their website. VDGIF webpages directs visitors to licensed wildlife rehabilitators and to the USDA Wildlife Services website.

The District of Columbia does not have an analogical agency to a state wildlife agency. Responsibility for both domestic and wild animal regulation is held by the Department of Health, Environmental Health Administration, Bureau of Community Hygiene, Animal Disease

Prevention Division. However, the Division does not share the typical state wildlife agency's mission of managing populations of species to be hunted, trapped, or fished but is primarily tasked with protecting human health and safety from animal-originating threats.

USDA Wildlife Services provides on-site services for a fee to businesses, municipalities and homeowner associations, airports and airfields, and agricultural producers. Wildlife Services typically does not provide on-site assistance to individual homeowners but gives advice by phone.

The public sometimes contacts the police with wild animal concerns. In jurisdictions where animal control officers are not empowered to carry firearms police are called on to field euthanize injured large animal, mainly deer struck by vehicles. They may also be called on to kill an animal suspected of suffering from rabies. Since the public sees the police as the agency to call on for any urgent situation, people sometimes contact police about other wildlife concerns especially when fear of an animal, warranted or not, provokes a sense of danger to people.

Some members of the public will mainly associate their concern about a wild animal with the potential for diseases to be transmitted to people and in consequence will contact local or state public health agencies. These agencies cannot offer help with other wildlife concerns.

2.2.1.3 Animal Care and Control Agencies and Animal Shelters

Very frequently, the public looks to the public entities they most commonly associate with animals; local animal care and control agencies and local animal shelters, for help with all questions and concerns about any type of animal. (Local shelters are included here with public agencies and their contractors although shelters can be part of a public agency, contractors for a public agency, or entirely independent private organizations since members of the public are rarely aware of this distinction, or care about it if they are aware.) Animal care and control and animal sheltering professionals commonly report that their agencies and organizations are called upon to deal with public demands for help with wildlife. However, little data have been collected in the past about either the volume or nature of wildlife-related services animal care and control agencies and shelters provide.

In spring 1997, The Humane Society of the United States (HSUS) surveyed humane agencies and animal shelters throughout the US about their involvement with and handling of wildlife in their shelters. Ninety-eight surveys were returned out of 199 distributed (49 percent

response rate). At the time of that survey nine years ago, animal shelters reported many of the same experiences and problems we continue to hear today.

Most (93 percent) dealt with wildlife in some capacity. About 60 percent of these handled volume in excess of 500 contacts and/or animals a year; some well in excess. Nearly three-quarters handled more than 100 contacts and/or animals a year. Most (87 percent) reported that they took in some wild animals. Nearly all of responding shelters that dealt with wildlife provided telephone assistance or advice. Most shelters referred callers to others, with a high percentage referring to wildlife rehabilitators. Most (94 percent) reported that they euthanized wild animals under at least some circumstances. A full summary of the survey's findings is included in Appendix x.

In 1996, researchers at Ohio State University's College of Veterinary Medicine Department of Veterinary Preventive Medicine surveyed animal care and control agencies in Ohio. Of 222 agencies contacted, 180 responded that collectively they took in 10,187 animals other than dogs and cats, including wildlife and less common and exotic pets. These species accounted for 3 percent of the responding agencies' intake.

The National Animal Control Association (NACA) conducts annual surveys of member organizations. The 2004 survey (most recent available) included responses from 27 member animal care and control and sheltering agencies and organizations. These ranged from very small entities to large county-wide animal control agencies. Data were collected on "other intakes," which included wildlife as well as less common and exotic pets, the disposition of these intakes, and two other services offered related to wildlife; removal and trap rental. Table 2.1 summarizes these data from the NACA 2004 survey.

NACA survey respondents primarily take in dogs and cats, but still handle a significant number of other species. While we cannot know from these data what proportion of other species handled were wild species; wild species could have been a major component of the numbers reported under other species.

While local animal care and control agencies, animal shelters, public health agencies, and police try to field the demands for wildlife related services that come their way, few are specifically trained, tasked, or funded to do so. As long ago as the first national conference dealing with urban wildlife in 1967 the point was made that state and federal agencies are responsible for wildlife in our country, regardless of whether the wildlife lives in rural or urban

Table 2.1 Summary of Data on Other Species (i.e. not dogs or cats) Handled from National Animal Control Association 2004 Survey

Number of Total Intakes, All Species (including dogs and cats)	
Number Responding	24
Mean (Average)	8,016
Median	4,750
Range	113 to 30,546
Number of Other Intakes, Not Dogs or Cats	
Number Responding	18
Mean (Average)	573
Median	125
Range	0 to 2,865
Other Species Intake as Percentage of Total Intake	
Number Responding	18
Mean (Average)	7.1
Median	2.1
Range	0 to 16.5
Number of Other Species Euthanized	
Number Responding	15
Mean (Average)	249
Median	57.5
Range	0 to 1,516
Other Species Euthanized as Percentage of Other Intake	
Number Responding	13
Mean (Average)	43.4
Median	31.3
Range	0 to 83.3
Wildlife Removal Services	
Number Responding	26
Number Offering Wildlife Removal Services	19
Percentage Offering Wildlife Removal Services	73.1
Wildlife Trap Rental	
Number Responding	26
Number Offering Wildlife Trap Rental	12
Percentage Offering Wildlife Trap Rental	46.2

areas. However, from that time to this state and federal agencies have provided little assistance to individuals with wildlife concerns.

2.2.2 Examples of Volume and Nature of Public Demand from Other Communities

Public demand for help with wildlife concerns is, of course, not limited to WMCOG communities. The next sections of the White Paper will summarize and discuss such demand within WMCOG as we found it reported in our survey. In many other communities, humane organizations, rehabilitators, and public agencies are also attempting to deal with these demands. Table 2.2 summaries information about some examples of hotlines services filling public demand for information with wildlife. All but one example are outside WMCOG jurisdictions. With the exception of USDA Wildlife Services' offices for Maryland and Virginia, all these examples are run by private non-profit organizations. All but one of these private non-profits are rehabilitators.

Table 2.2 [This table prints on legal paper. It is included in a separate electronic file.]

The volume of calls reported varies from several hundred a year in semi-rural northwestern Indiana to 30,000 in Toronto. The volume of calls per 1,000 (human) population varied considerably as well, from fewer than 1 call per year for every 1,000 population to nearly 15 calls per year per 1,000; averaging a little more than 5 per 1,000 a year among all the examples. Some of the example hotlines reported the nature of the calls they received, which were pretty consistent among all reports: sick, injured, or orphaned wild animals and nuisance wildlife were most common.

2.3 Metropolitan Washington Council of Governments, Animal Services Committee

Metropolitan Washington Council of Governments (MWCOG) is a regional organization of Washington, D.C., area local governments. MWCOG is composed of 19 local governments including and surrounding our nation's capital plus area members of the Maryland and Virginia legislatures, the U.S. Senate, and the U.S. House of Representatives. An independent, nonprofit association, MWCOG is dedicated to enhancing the quality of life and competitive advantages of the Washington metropolitan region by providing a forum for consensus building and policymaking; implementing intergovernmental policies, plans, and programs; and supporting the region as an expert information resource.

MWCOG's Human Services and Public Safety Policy Committee is served by the Animal Services Committee. This technical committee's primary purpose is to advise the Human Services and Public Safety Policy Committee on animal care and control matters, including animal care and control services, wildlife, disaster planning, public service information, humane education, and dangerous animals. As part of this purpose, the Animal Services committee's subcommittee on Wildlife prepared this white paper on how public demand for information and assistance with wildlife questions and concerns impacts public services, especially animal care and control and animal sheltering services. A key element of this effort was a survey of entities in MWCOG jurisdictions who are impacted by this demand asking about the quantity and nature of that demand and how they respond to the demand.

3. Survey Procedure

3.1. Identifying Potential Respondents

A list of potential respondents was developed from several sources of public and private entities who receive wildlife-related calls from the public.

WMCOG provided a list of animal care and control (ACO) and sheltering agencies and organizations, public and private. A list of state and local health departments, who receive calls on zoonoses and the wild animals that may be affected by them, was compiled, as was a list of state and local police, who are called to euthanized deer struck by vehicles. Maryland Department of Natural Resources and Natural Resources Police, Virginia Department of Inland Game & Fisheries, and the US Department of Agriculture's Wildlife Services were also placed on the list.

Lists of permitted rehabilitators were obtained from the Maryland and Virginia state permit issuing offices. (No rehabilitators were permitted in the District of Columbia.) Since the state lists are not updated frequently, they were compared to membership lists of two voluntary associations of rehabilitators (International Wildlife Rehabilitators Council (IWRC) and National Wildlife Rehabilitators Association (NWRA)) for most current information on member rehabilitators.

The Maryland state office that permits Nuisance Wildlife Cooperators, primarily commercial nuisance wildlife control operators (NWCO), provided a list of Cooperators within Maryland WMCOG jurisdictions. The Virginia state agency was not able to furnish a similar list for NWCO in that state, therefore, NWCO in Virginia were not included.

The public within WMCOG jurisdictions also contacts national animal welfare organizations about wildlife problems because a number of these organizations have local headquarters or offices. Organizations of this type were also identified as potential respondents.

3.2. How and When Survey was Distributed

All the entities identified as potential respondents were contacted by phone to explain this effort and request their participation. Follow-up calls were made to potential respondents not reached initially. Surveys were mailed, faxed, or e-mailed (as respondents preferred) to potential respondents who agreed to participate beginning in March 2004 and continuing through September 2004. Survey recipients who had not returned a survey within a month were called

up to two times to encourage response. Table xx in Appendix x summarizes survey distribution by category of potential respondent and WMCOG jurisdiction.

3.3. Survey Instrument

The survey asked 43 questions. Ten questions identified and described each respondent. Two questions were asked only of police about issues specific to field euthanizing deer. The remaining questions asked respondents to report the volume and nature of pubic demand for information and assistance with wildlife and how each respondent responded to the demand. The entire survey instrument is provided in Appendix x.

4. How Many and Who Responded

4.1. Responses

Sixty-five completed surveys were returned, 32.2 percent of the surveys distributed. A list of all respondents is included in Appendix x.

4.2. Respondents by Category

Respondents were grouped into six categories: Animal Care and Control and/or Sheltering Organizations (ACO/Shelters), Wildlife Rehabilitators, Nuisance Wildlife Control Operators (NWCO), Police, Other Governmental Agencies, and Other Organizations. The ACO/Shelters category includes all public and private entities providing animal care and control services including animal sheltering services. Some respondents in this category provide both care and control services and sheltering; others provide only one of these. The Wildlife Rehabilitators category includes private individuals and organizations that provide direct care of injured and/or orphaned wild animals in order to release them back into their natural habitat to live as wild animals. The NWCO category includes primarily businesses that offer services to the public for a fee including trapping or otherwise removing wild animals from buildings and property, animal-proofing buildings, and similar services to deal with nuisance wildlife. A few respondents in the NWCO category do not run this kind of businesses but are registered with the Maryland Department of Natural Resources as "Wildlife Cooperators," (the state's nearest equivalent category to NWCO) and offer advice about nuisance wildlife and, in some cases, provide some hands-on assistance usually with very limited species or situations. The Police category includes public law enforcement agencies. The Other Governmental Agencies category includes public agencies other than police and animal control agencies. Most of the respondents in this category are state and local public health agencies. The Other Organizations category includes national animal welfare organizations and organizations dedicated to a single species or species group.

Table 4.1 presents number of responses in total and by category, percentage of all responses represented by each category, and percentage of all potential respondents identified who returned surveys (response rates) by categories.

Table 4.1.
Completed Surveys Returned by Category

Category	Number	Percentage of Responses	Response Rate (%)
Rehabilitators	23	35.4	32.9
NWCO	15	23.1	17.4
ACO/Sheltering	10	15.4	52.6
Police	6	9.2	85.7
Other Governmental Agencies	6	9.2	40
Other Organizations	5	7.7	100
All Categories	65	100	32.2

Response rates varied greatly by category. In particular, the NWCO response rate was only 17 percent while other categories had rates over 50 percent and even as high as 100 percent. Given that a large number of NWCOs were sent surveys (more than any other category), their low response rate heavily affected the overall response rate. Leaving out the NWCOs, the response rate for the other five categories was 43.1 percent.

4.3. Geographic Areas Respondents Serve

Nearly all respondents (63) reported what geographic area or areas they serve. Seven respondents, including the national organizations, reported they serve the entire metropolitan area. Many respondents indicated they serve areas outside MWCOG jurisdictions as well as areas within MWCOG; NWCOs and Rehabilitators frequently. A few served all of either Maryland or Virginia.

4.4. Respondents' Funding Sources

Fifty-nine respondents gave information about the sources of funding for their activities. These sources were categorized as public funding (tax-supported government budgets); private funding (donations, gifts-in-kind, respondents' own funds); or profits (business income from their wildlife activities). Sources of funding reported by respondents in each category are presented in Table 4.2. Each respondent could report funding from more than one source.

Not surprisingly, NWCOs generally received funding from profits; ACO/Shelters, Police, and Other Governmental Agencies from public funding; and Rehabilitators and Other Organizations from private funding. Mixed funding sources were most commonly among

Table 4.2
Funding Sources Reported by Category

	Number Reporting Funding Source			
Category	Public	Profits	Private	Total Number Responding
Rehabilitators	1	2	17	19
NWCO	0	11	3	14
ACO/Shelter	10	0	4	10
Police	6	0	1	6
Other Governmental Agencies	5	1	0	5
Other Organizations	0	1	4	5
Total	22	15	29	59
Percentage	37	25	49	

ACO/Shelters (40 percent of this category received both public and private funding) and were rare outside this category.

4.5. Respondents' Annual Budgets

One measure of the size of respondents' overall activities and the resources available to accomplish their missions is annual budget. Fewer than half of respondents reported annual budgets amounts. Summary information about these responses is shown in Table 4.3. All but one respondent reporting a budget above the median have primary mission and activities not related to wildlife or not limited to the WMCOG jurisdictions. Only two (of eight) ACO/Sheltering respondents fell below the median, however all but one of the Rehabilitators who answered this question were below the median. Overall among our respondents, those solely or mainly dealing with wildlife reported smaller budgets than the respondents as a whole.

Table 4.3
Summary Information on Reported Annual Budgets

All Reported Budget Amounts	
Number Reporting	27
Range	$6,000 to $300 million
Mean	$17 million
Median	$171,000

Budget Amounts Reported from Respondents Solely or Mainly Offering Wildlife Services	
Number Reporting	11
Range	$6,000 to $200,000
Mean	$52,000
Median	$40,000

5.0 Findings

5.1 Public Demand for Information and Assistance

The survey asked for information to characterize both the volume of demand from the public for information and assistance with wildlife and the species and issues about which the public demanded this information and assistance.

5.1.1. Volume of Calls Received

Table 5.1 summarizes the total number of calls and the median (middle value when all responses are ranked in numeric order) number of calls respondents reported receiving from the public seeking information and assistance with wildlife questions. The 60 respondents who answered this question reported receiving nearly 141,000 calls a year altogether. While the nature of this survey does not allow us to extrapolate the total volume of calls made in the WMCOG jurisdictions to all agencies, organizations, and individuals who receive wildlife inquiries, the reported volume of calls is only part of the total volume which is likely much larger than the number our respondents reported.

ACO/Shelters reported the largest volume of all wildlife calls per respondent; rehabilitators reported the second highest volume. Among our respondents, public demand as measured by the reported volume of all wildlife calls is falling most heavily on ACO/Shelters and Rehabilitators, with significant volumes falling on Other Governmental Agencies and Police. NWCOs reported the least volume of calls per respondent.

When respondents were asked to consider two common types of wildlife concerns, nuisance wildlife and orphan wildlife, different categories of respondents reported very different volumes of calls concerning each type. Most calls about orphan wildlife were reported by Rehabilitators and ACO/Shelters; hardly any orphan calls were reported by other categories.

Per respondent, ACO/Shelters reported receiving the most calls about nuisance wildlife. Other Governmental Agencies received more calls, both in total and per respondent, and Police more calls per respondent about nuisance wildlife than NWCOs, whose business is dealing with nuisance wildlife.

The volume of demand for all wildlife calls, nuisance wildlife calls, and orphan wildlife calls fell most heavily on ACO/Shelters who report the largest volume of all three types of calls per respondent. Rehabilitators report the second heaviest demand, per respondent, for all wildlife calls and for orphan wildlife calls. Clearly, these two categories of respondents are

Table 5.1 Volume of Calls Received from the Public for Information and Assistance with Wildlife

All Wildlife Calls		Nuisance Wildlife Calls		Orphan Wildlife Calls	
All Respondents (60)		All Respondents (45)		All Respondents (42)	
Total annual number of calls	140,935	Total annual number of calls	23,396	Total annual number of calls	18,608
Median annual number of calls	275	Median annual number of calls	35	Median annual number of calls	60
NWCO (14)		NWCO (13)		NWCO (10)	
Total annual number of calls	3,184	Total annual number of calls	2,627	Total annual number of calls	152
Median annual number of calls	70	Median annual number of calls	30	Median annual number of calls	7.5
Other Governmental Agencies (6)		Other Governmental Agencies (5)		Other Governmental Agencies	
Total annual number of calls	12,117	Total annual number of calls	9,574	Total annual number of calls	*
Median annual number of calls	300	Median annual number of calls	60	Median annual number of calls	*
Police (6)		Police (5)		Police (5)	
Total annual number of calls	1,385	Total annual number of calls	937	Total annual number of calls	70
Median annual number of calls	131.5	Median annual number of calls	75	Median annual number of calls	20
Rehabilitators (21)		Rehabilitators (13)		Rehabilitators (16)	
Total annual number of calls	77,776	Total annual number of calls	1,102	Total annual number of calls	13,294
Median annual number of calls	540	Median	17	Median annual number of calls	200
ACO/Shelters (10)		ACO/Shelters (7)		ACO/Shelters (6)	
Total annual number of calls	45,443	Total annual number of calls	9,141	Total annual number of calls	4,832
Median annual number of calls	965	Median annual number of calls	450	Median annual number of calls	275

Number in parentheses following category name indicates number of respondents in that category who answered the question.
Asterisk (*) indicates too few respondents in the category to disaggregate. "Other" category is not included in this table because it had too few respondents to all questions to disaggregate.

carrying much of the burden of the public's demand for information and assistance with wildlife. Other Governmental Agencies and Police also report significant volume of demand. For the types of concerns this survey measured, public agencies and private rehabilitators carry the overwhelming bulk of the load in dealing with public demand for information and assistance with wildlife.

5.1.2 Types of Calls Received

Respondents were asked to rank how frequently they received calls about five typical concerns (Animal in Yard; Animal in Chimney, Basement, Attic, Etc.; Injured Animal; Animal Behaving Strangely; and Babies that Seem to be Without Mother) with a rank of 5 for most frequent and 1 for least frequent. Table 5.2 presents the average rankings.

Table 5.2

Average Frequency Ranking of Typical Wildlife-Related Calls
5 Being Most Frequent and 1 Being Least Frequent

		Average Ranking of Typical Calls				
Respondent Category	Number Responding	Animal in Yard	Animal in Chimney, Basement, Attic, Etc.	Injured Animal	Animal Behaving Strangely	Babies that Seem to be Without Mother
Rehabilitators	21	3.0	2.7	4.0	2.0	4.0
NWCO	14	3.6	3.4	1.3	1.2	1.4
ACO/Sheltering	9	3.6	3.1	2.9	2.6	3.1
Police	4	3.5	2.3	4.5	2.5	1.5
Other Governmental Agencies	6	4.3	2.5	3.2	3.5	1.8
Other Organizations	4	2.8	2.8	3.3	1.8	3.7
All Categories	58	3.4	2.9	3.3	2.1	2.9

Animal in Yard received the highest average ranking from all respondents, closely followed by Injured Animal indicating these were frequent concerns. Animal Behaving Strangely received the lowest average ranking indicating this was the least frequent concern.

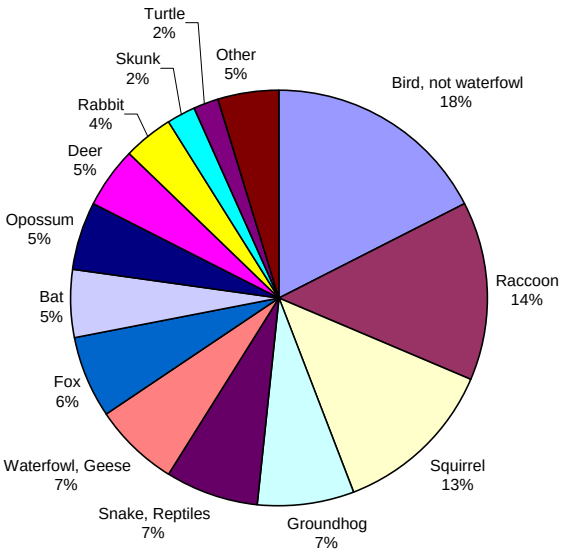
Based on the respondents' rankings, the public directs different concerns to different categories of respondents with the exception that the public turns to ACO/Shelters for all concerns. Police especially receive calls about injured animals, likely due to their role in field

euthanizing wild animals struck by vehicles. The public turns to Rehabilitators with concerns about the welfare of wild animals. NWCOs receive calls mainly about the presences of animals in and around homes. The Other Governmental Agencies category, which includes health authorities, highly ranked the types of calls most likely to be related to their responsibilities for zoonoses (Animal in Yard and Animal Behaving Strangely) suggesting the public is turning to this category with concerns about disease risks.

5.1.3 Species Callers are Concerned About

Respondents were asked to cite up to five wild animal species or groups of species about which the public most frequently demanded information and assistance. Figure 5.1 illustrates the percentage of all categories of respondents citing each species or group. A detailed listing of the most common species or groups cited by each category of respondents is given in Table A.x in Appendix x. Not surprisingly, the species and groups cited by the greatest number of respondents are those common in the Washington metropolitan area. Birds other than waterfowl (such as songbirds, crows, and raptors), raccoons, and squirrels were cited most frequently.

Figure 5.1 Percentages of All Respondents Citing Species as Callers' Top Concern



Respondents also reported what species they had recently begun receiving calls about that had not been concerns before. Table 5.3 summarizes their responses. One-third of those responding to this question reported they had not received calls about any new species. For those citing new species, by far the most common was coyotes. The presence of mountain lions

and pelicans on the list highlights the nature of these data as reports of what members of the public are asking about rather than what new species require ongoing response within the WMCOG jurisdictions.

Table 5.3 New Species Calls Being Received About

Species	Number Citing
Coyote	12
Geese	4
Mountain lion	3
Fox	3
Bear	3
Ducks	2
Pelican	2
Snakes	2
Raccoons	2
Deer	2
Beaver	2

Forty-eight respondents answered this question, 16 reported they received calls about no new species, some cited multiple species. In additional, 10 other species were each cited by only one respondent.

Respondents were asked to estimate what percentage of their overall call volume concerned three species or groups of species believed to be of high local concern or to be emerging concerns: Canada geese, deer, and exotic species. The 52 respondents who answered this question for Canada geese reported that an average of 12 percent of their calls concerned geese. Rehabilitators reported the highest average; 15 percent of their calls concerned geese.

The 55 respondents who answered this question for deer reported that an average of 9 percent of their calls concerned deer. Police reported the highest average; 45 percent of their calls concerned deer. Eighty percent of the 41 respondents who cited the nature of callers' deer concerns received calls about deer hit by a vehicle, 51 percent received calls about orphaned fawns, and 41 percent received calls about deer as nuisance (each respondent could cite multiple concerns).

The 43 respondents who answered this question for exotic species reported that an average of 6 percent of their calls concerned exotic species. Rehabilitators reported the highest

average; 13 percent of their calls concerned exotic species. Seventy-three percent of the 37 respondents who cited the nature of callers' concerns received calls about rehoming owned exotic pets and 57 percent received calls about abandoned exotic animals found (each respondent could cite multiple concerns).

5.2 Responding to Demand

When respondents receive a call from the public about wildlife, there are many potential ways they can respond ranging from sending someone to the site or taking time to educate the caller over the phone (responses requiring considerable time and resources) to making a referral or offering no information or assistance (responses requiring little effort). (It should be noted, that in some cases the best response for a specific inquirer and animal may not be the one requiring the most time and resources.)

5.2.1 Typical Responses

Respondents were asked to describe how they responded to the same five typical concerns they had ranked for frequency (Animal in Yard; Animal in Chimney, Basement, Attic, Etc.; Injured Animal; Animal Behaving Strangely; and Babies that Seem to be Without Mother). Based on their open-ended responses, common categories of how respondents typically reacted were developed and responses tabulated (Table 5.4).

Typical responses reported by each category of respondents closely mirror each category's mission and typical activities. Rehabilitators report that they overwhelmingly respond by educating callers about the wildlife the callers are concerned about. They report educating more frequently, by a very great margin, than any other category of respondent and more frequently than they do anything else, including taking animals into care or referring calls to others. The strong emphasis on educating callers is evident for all types of concerns except for Injured Animal for which they most frequently reported that the animal was taken to a facility for care.

Two ACO/Shelters reported that they educate callers for only one type of concern (Animal in Yard). No other category of respondents reported that they educated callers in their descriptions of their typical responses. ACO/Shelters most frequently reported that they respond by dispatching to the site. Other Governmental Agencies primarily refer callers to others; some referred all animal calls to the ACO in their jurisdictions.

Table 5.4 Number of Respondents Reporting Each Response to Public Inquiries about Specific Types of Concerns

Animal in Yard

	Educate Caller	Respond if Sick	Advise to Leave Alone	Trap	Refer Calls	Dispatch to Site	Take to Facility for Care	Do not Respond and Other Responses
All Respondents (33)	14	3	5	5	3			3
Percentage of All Respondents Citing	42	9	15	15	9	0	0	9

Animal in Building

	Educate Caller	Respond if Sick	Advise to Leave Alone	Trap	Refer Calls	Dispatch to Site	Take to Facility for Care	Do not Respond and Other Responses
All Respondents (33)	10			7	10	4		6
Percentage of All Respondents Citing	30	0	0	21	30	12	0	12

Injured Animal

	Educate Caller	Respond if Sick	Advise to Leave Alone	Trap	Refer Calls	Dispatch to Site	Take to Facility for Care	Do not Respond and Other Responses
All Respondents (33)		2		1	5	6	14	5
Percentage of All Respondents Citing	0	6	0	3	15	18	42	15

Table 5.4 Number of Respondents Reporting Each Response to Public Inquiries about Specific Types of Concerns (Continued)

Animal Behaving Strangely

	Educate Caller	Respond if Sick	Advise to Leave Alone	Trap	Refer Calls	Dispatch to Site	Take to Facility for Care	Do not Respond and Other Responses
All Respondents (33)	8		1	3	8	7		6
Percentage of All Respondents Citing	24	0	3	9	24	21	0	9

Babies that Seem to be Without Mother

	Educate Caller	Respond if Sick	Advise to Leave Alone	Trap	Refer Calls	Dispatch to Site	Take to Facility for Care	Do not Respond and Other Responses
All Respondents (33)	10		6		4		5	8
Percentage of All Respondents Citing	30	0	18	0	12	0	15	24

Respondents could indicate multiple responses.

NWCOs frequently reported that they responded by trapping. This response was most often reported for Animal in Yard and Animal in Building. About half the reported responses by NWCO were actions other than trapping. Referring calls was the second most commonly cited response from NWCO and two NWCO reported they took orphaned young wildlife to a facility for care.

For one of these concerns, orphaned wildlife, respondents were asked for more detailed information about how they typically respond (Table 5.5). More than a third reported that they referred callers to others, most frequently to rehabilitation. On referrals to rehabilitators, respondents were further asked if they gave callers a specific referral with a phone number. Nearly three-quarters of those answering this question reported that they supplied specific rehabilitation referrals with a phone number to callers concerned about orphaned wildlife. Slightly more than a quarter reported that they educate the caller; the majority of these being rehabilitators. Slightly less than a third reported that they respond directly, either dispatching to the site or transporting the orphans to care.

5.2.1.1 Responding to Migratory Birds and Rabies Vector Species

Our respondents are dealing with many inquiries about birds; a quarter of respondents cited birds as the most common callers' concern. However, only a little more than one-third of respondents report they hold the necessary federal Migratory Bird Permit from the US Fish and Wildlife Service to directly aid or euthanize nearly all species of birds (Table 5.6). A significant proportion of rehabilitators (61 percent) and half the ACO/Shelters hold Migratory Bird Permits.

Respondents without Migratory Bird Permits can legally give advice, make referrals, handle unprotected species, and provide services that do not harm or require handling the birds (for example installing one-way doors to allow birds to exit a building without returning). Respondents who do not hold Migratory Bird Permits reported that they refer calls that require direct aid or handling of protected species.

Similar to migratory birds, species of mammals known to be the most common carriers (and victims) of the rabies virus (raccoons, bats, skunks, and canines) or rabies vector species (RVS) are subject to more restrictive legal requirements than other species. This includes restrictions on rehabilitation of RVS. Respondents in the ACO/Shelter and NWCO categories were asked if they knew, specifically, a wildlife rehabilitator authorized to receive rabies vector species; few did. Only 8 of the 37 who answered this question (22 percent) knew the name and

Table 5.5 How Respondents Reported Handling Orphaned Young Wildlife

Responses	All Respondents (49)		NWCO (10)	Police (5)	Rehabilitators (18)	ACO/Shelters (9)
	Number	Percentage	Number	Number	Number	Number
All Referrals	17	35	5	3	2	4
Refer to Rehabilitation	10	20	2	1		4
Refer to Local ACO/Shelter	5	10	3	2		
Refer to Wildlife Hotline	2	4			2	
Educate Caller	13	27	1		7	2
Ask Caller to Take to Facility for Care	3	6			3	
All Direct Responses (Dispatch and Transport)	15	31	6		4	5
Dispatch to Site	4	8			2	2
Dispatch to Site & Transport or Arrange Transport to Facility for Care	5	10			2	3
Transport to Facility for Care	6	12	6			
Other Responses and No Responses	5	10		2	2	

Number in parentheses following category name indicates number of respondents in that category who answered the question. "Other" and "Other Governmental Agency" categories are not included as separate categories in this table because they had too few respondents to disaggregate. Respondents could indicate multiple responses.

Table 5.6
Respondents' Federal Migratory Bird Permit Status and Response to Calls about Migratory Birds by Non-permit Holders

Category	Number Responding	Number Holding Federal Migratory Bird Permit	Typical Response of Respondents not Holding Permit
All Respondents	65	23	
NWCO	15	0	Refer to rehabilitator or unspecified "others"
Other Organization	5	1	Refer to permitted rehabilitator
Other Governmental Agency	6	3	Refer to local animal control
Police	6	0	Refer to local animal control or to Northern Virginia Wildlife Rescue League hotline
Rehabilitator	23	14	Transfer to permitted rehabilitator or notify state wildlife agency
ACO/Shelter	10	5	Transport to rehabilitator or notify state wildlife agency

address of a rehabilitator who could receive RVS. Only 1 respondent (in 10) in the ACO/Shelter category reported knowing one. A third of responding Police and Other Governmental Agencies reported knowing one and 20 percent of NWCO reported knowing one.

5.2.1.2 Preventing Conflict by Educating the Public

In addition to educating callers while on the phone, respondents were asked about their efforts to education people who contact them and, more generally, the public at large about ways to prevent nuisance situations and conflicts in the future. Slightly fewer than half the respondents reported that they distributed educational materials to prevent nuisance complaints about wild animals or engaged in other public education efforts to this end (Table 5.7). Public education efforts cited by respondents included maintaining websites; tabling at community events; distributing newsletters, press releases, flyers, brochures, and public service announcements; writing letters to the editors of newspapers; and making presentations at school.

Table 5.7 Public Education Activities

	Materials Given to Prevent Conflicts			Other Public Education Efforts		
	Yes	No	Percentage Yes	Yes	No	Percentage Yes
All Respondents (65)	29	36	45	32	33	49
NWCO (15)	4	11	27	1	14	7
Other (5)	3	2	60	5	0	100
Other Governmental Agency (6)	3	3	50	3	3	50
Police (6)	2	4	33	2	4	33
Rehabilitators (23)	12	11	52	13	10	57
ACO/Shelters (10)	5	5	50	8	2	80

Number in parentheses following category name indicates number of respondents in that category who answered the question.

Few NWCO report they offer preventative public education while all the respondents in the Other category, that includes non-profit animal welfare organizations, offer it. Most of the ACO/Shelters report they offer preventative public education. Rehabilitators, who bear a large part of the burden for direct education when dealing with callers on the phone, report an average amount of this type of preventative education.

5.2.1.3 Trap Loans

An old and not uncommon practice for animal control agencies and shelters to deal with public demand for help with wildlife has been to loan or rent live traps. Less than one-quarter of our respondents reported that they loan traps (Table 5.8). The category of respondent with the highest proportion loaning traps was ACO/Shelters, half of which reported loaning traps.

Respondents were further asked about the disposition of the animals caught in loaned trapped and brought to the trap lender. The responses to this question are difficult to interpret since respondents who reported they did not loan traps nevertheless answered the questions about disposition. This suggests the questions were not well understood. Respondents could select “rehabilitation,” “euthanasia,” or “both” (meaning both rehabilitation and euthanasia) as the outcomes for animals brought to them as a result of trap loans. Considering only the 15 respondents who stated they loaned traps, more than half (8) selected “both,” 4 selected “rehabilitation,” and 2 selected “euthanasia.”

Table 5.8
Respondents Offering to Loan Traps to the Public

Category	Number Responding	Number Offering to Loan Traps
All Respondents	65	15
NWCOs	15	2
Other Organizations	5	0
Other Governmental Agency	6	1
Police	6	2
Rehabilitator	23	5
ACO/Shelters	10	5

These trap lenders reported some information about how disposition decisions for these animals were made. Of the 13 who answered, 4 reported that these decisions were made by others to whom the respondents turned over the animals. The other 9 reported animals' condition, availability of a rehabilitator, and state or county health department requirements for handing rabies vector species were the criteria in making disposition decisions.

5.2.2 Lethal versus Non-lethal Responses

The wild animals who are subject of the public's concerns may be handled in various ways; some lethal and some not. How respondents made decisions about what techniques to use, lethal or non-lethal, was queried. They were also asked what lethal techniques were available to them, whether they inform the public about lethal responses, and who performed euthanization.

The responses to the question about how decisions were made suggest that this question was not well understood by respondents and/or that it was understood differently by different types of respondents as they tried to answer it from their perspective. The aggregated responses, therefore, should be considered in this light (Table 5.9). Some respondents, perhaps showing their ambivalence about this issue or perhaps simply not understanding the question, gave self-contradictory answers (such as one that respondent only used non-lethal responses but listing criteria for euthanizing, a lethal response).

More than half the respondents who answered this question (57 percent) mentioned specific reasons for lethal response. These included legal or permit requirements (such as those applying to rabies vector species and animals that will not be releasable after treatment), danger to people, history of a bite, apparent illness of the animal, and degree of suffering the animal is experiencing. The remaining respondents who stated they responded lethally either did not

supply a reason or gave general responses such as they decided based on the species without explaining which species were killed and which were not or why.

Table 5.9 How Respondents Decide Between Lethal and Non-Lethal Responses

Protocol for Decision Making	All Respondents (49)
Use only lethal	2
Use only non-lethal	8
Use non-lethal, but lethal also used for some species or situations	7
Use lethal when law or permit requires	9
Use lethal when people endangered or bitten or when animal sick or suffering	19
Decision made by someone else (i.e. veterinarian, shelter, rehabilitator)	5
Have no protocol for decision or response unclear	8

Respondents could give multiple answers.

Wild animals can be euthanized by the respondents themselves or turned over to another agency or individual to be euthanized. Slightly more than half the respondents (55 percent) reported that they euthanized themselves. For those respondents who reported they did not euthanize, 21 percent reported the animals were euthanized by a veterinarian, 17 percent reported they were euthanized by a shelter, and 7 percent reported they were euthanized by a rehabilitator.

Respondents were asked what lethal responses were available for them (Table 5.10). Of those that answered this question, nearly half had injectible drugs available. Slightly less than a third had firearms available. Other lethal responses mentioned include lethal traps, burrow exploders (devises that pump propane gas into animal burrows and explode the gas, killing or maiming the animals inside by concussive force), knives, and cardiopuncture.

Respondents were asked to indicate whether they informed members of the public that an animal would be killed as a matter of protocol or only if a member of the public asked. Their responses are summarized in Table 5.11. Most (93 percent) answered that they did share information that an animal would be killed; as a matter of protocol (11 percent), when asked (71 percent), or both as a matter of protocol and when asked (14 percent). All of the few respondents who did not share the information that an animal would be killed were NWCOs.

Table 5.10 Lethal Responses Available to Respondents

Techniques	All Respondents (23)
All legal techniques	1
Lethal traps & burrow exploders	2
Firearms	7
Injectible drug	11
Knife & cardiopuncture	2
Gas (type not specified)	2

Respondents could give multiple responses.

Table 5.11 How Information on Lethal Response Shared with the Public

	Protocol to Share Information	Share Information When Public Asks	Both Protocol and When Asked	Do Not Share Information on Lethal Responses
All Respondents (44)	5	31	6	3
Percentage of All Respondents	11	71	14	7
NWCO (13)	2	6	2	3
Police (5)		4	1	
Rehabilitators (16)	3	9	3	
ACO/Shelters (9)		9		

Number in parentheses following category name indicates number of respondents in that category who answered the question. "Other" and "Other Governmental Agency" categories are not included as separate categories in this table because they had too few respondents to disaggregate.

Respondents were asked if they had to euthanize healthy wild animals due to a lack of other options for these animals. Table 5.12 summarizes responses to this question. Just over half of those who answered reported that they did euthanize healthy wild animals for this reason. ACO/Shelters and Police were the most likely to report euthanizing for lack of options; Rehabilitators were the least likely.

Table 5.12 Euthanization of Healthy Wild Animals Due to Lack of Other Options

Category	Number Responding	Number Reporting they Euthanize Healthy Animals	Percentage Reporting they Euthanize Healthy Animals
All Respondents	45	23	51
NWCOs	11	7	64
Police	8	6	75
Rehabilitators	17	5	29
ACO/Shelters	9	7	78

Does not include respondents who stated question did not apply or who left the question blank. Other and Other Governmental Agencies categories had too few responses to disaggregate.

Respondents were also asked the number of healthy wild animals they euthanize for this reason. Only one respondent was able to report a precise number. Some stated ranges of numbers, often with qualification indicating the ranges were rough estimates. Some gave qualitative responses such as “some” or “few.”

Due to their role in field euthanizing deer struck by vehicles, police were asked for specific information about training and equipment for this task. Six departments responded; one stating they are not authorized to field euthanize. Of the five other respondents, most (3) include training for this task in regular department firearms course, one has officers train with Animal Control, and one includes a specific training module on this topic in their Academy. One department mentioned that an Animal Control Officer is frequently present on the scene to advise responding police officers in accomplishing this task. All five responding department use firearms. In addition, two departments use injectible drugs. One specified that Animal Control is requested to come to scene to euthanize as a first course of action and firearms are used if they are not available or other circumstances do not allow. Another department listed use of knives secondarily to firearms as equipment for field euthanizing deer.

6.0 Discussion of Findings

6.1 Volume of Demand

The findings from our survey, as well as the information summarized in Table 2.2 in Section 2 about wildlife hotlines, confirm the individual experience of everyone performing animal related jobs in the MWCOG region and elsewhere. Large public demand for information and assistance with wildlife questions and concerns exists. Currently in MWCOG, this large public demand is falling unevenly on a patchwork of public and private entities with varying missions and resources; some with missions entirely unrelated to wild animals and most with limited resources to perform their primary missions leaving little to deal with wildlife.

This is particularly true of ACO/Shelters who reported the largest volume of wildlife calls per respondent but who are generally tasked and funded to deal with wildlife only in specific limited circumstances such as when there is a potential threat to public health. The second largest volume is reported by rehabilitators. Rehabilitators' mission of helping individual animals return to wild lives is more closely aligned with meeting some of the demand for wildlife information and assistance; in particular the demand relating to injured and orphaned wild animals. At the same time, they are also bearing much of the demand not specifically related to their mission.

Significant volume of demand is also falling on Other Governmental Agencies and Police. Considering these together with ACO/Shelters, public agencies are carrying a great deal of the burden of this demand. Clearly, the public sees their wildlife concerns as matters public agencies should deal with. This interpretation is reinforced by the finding that the NWCO in our survey, nearly all private businesses, reported the least volume of demand.

The finding that Rehabilitators are second to ACO/Shelters in the volume of demand they are receiving may reflect the degree to which the other types of entities refer the public to rehabilitators although our survey did not measure this directly. The survey did find that referring calls was a common respond to various types of wildlife concerns. It was reported as the most common response for calls about orphaned young wildlife, a concern which is best addressed by rehabilitators.

This survey only asked about telephone calls. No information was collected about the volume of walk-in or e-mail demand. It is likely that as internet access spreads, more and more public demand will be received electronically. Neither did the survey collect information about

websites respondents may maintain nor the volume of traffic those websites receive. All these; walk-ins, e-mails, and website traffic, are also forms of public demand for information and assistance that was not measured.

6.2 Nature of Demand

Not surprisingly, our survey found that common situations and common animals generated more demand than less common situations and animals. Thus, more demand for information and assistance was reported for animals seen in yards (a very common occurrence) than for other situations that occur less frequently. Most demand was reported for animals that are most common in MWCOG urban and suburban areas.

The frequent demand for information and assistance in the common situation of an animal seen in a yard; a situation that rarely represent a significant threat to people or property, deserves particular notice. Many members of the public continue to call about seeing animals, especially rabies vector species, which are acting normally because they retain out-dated or misunderstood information that suggests to them that merely seeing the animal is enough to indicate the animal is rabid and dangerous. Basic education on common wildlife species more generally communicated in advance of sighting may be a way to reduce this unnecessary demand.

Our survey results suggest that demand is often directed to the most appropriate entities for specific types of concerns with the exception that the public turns to ACO/Shelters for all concerns. For example, the public mainly contacts organizations or individuals dedicated to animal welfare (ACO/Shelters and Rehabilitators) with welfare-related orphaned wildlife concerns. It is not possible to determine from our findings if this is because the public is sophisticated enough about wildlife concerns to direct their demand appropriately or if this is because of referrals between categories redirecting demand.

Further, the role of referrals driving up apparent volume of demand is not measured here but may be an important factor in overall volume. It is a common tale that when a caller finally reaches someone with an answer to the concern that caller has already talked with someone else, often several someones, who could not help but suggested other phone numbers. In the specific cases of calls about migratory birds, the volume of calls may be driven up, in part, by legal restriction that requires referral to Migratory Bird Permit holders for direct aid or handling of nearly all bird species. One way to reduce the overall volume of demand placed on all entities

may be to find ways to direct each type of demand to the most appropriate resource in the first place or, at least, very early in the search for help.

6.3 Responding to Demand

6.3.1 Typical Responses

Typical responses reported to each of the typical concerns presented were generally appropriate for the nature of each concern. For example, Concerns about Injured Animals were more frequently responded to by the animal being taken to a facility for care than any other concern; just as one would expect. Babies that Seem to be Without Mother was occasionally responded to by taking them to care, suggesting appropriate public education was distinguishing real orphans from those young the public often mistakes for orphans. No other concern led to the response of taking an animal to care.

The most resource-demanding response, dispatching to site, was not mentioned as a response to concerns that were unlikely to require this level of assistance (Animal in Yard, Babies that Seem to be Without Mother). For other concerns, dispatching to site was not a frequently mentioned response. As would be expected, it was most commonly reported, but still by less than a quarter of respondents, for Animals Behaving Strangely, a concern that likely includes sick animals requiring this level of direct assistance.

Trapping was most frequently mentioned as a response to Animal in Building, a response that is more appropriate to this concern then to any of the other concerns. However, trapping was not an uncommon response to Animal in Yard; primarily from NWCOs. While the most common response to an Animal in Yard was to educate the caller, the use of trapping in this situation that very infrequently presents any real threat to human health or property suggests that some animals are being inappropriately removed.

While a majority of respondents were able to supply a specific rehabilitator referral with phone number for orphan wildlife concerns, less than a quarter knew the name and address of a rehabilitator authorized to receive RVS. Hardly any ACO/Shelters knew where they could take RVS for rehabilitation. This general lack of knowledge about where these common species could receive care strongly suggests that few are benefiting from rehabilitation.

6.3.2 Educating the Public to Prevent Conflicts

Any conflict requires two parties and conflicts between people and wild animals are no different. It is common to think that people must responses to these conflicts by dealing with the

animals. However, conflicts can also be approached from the other side; by dealing with the people. This is primarily educating the public about what is normal for the wild animals they see, how they can prevent conflicts from developing, and how they can resolve some conflicts by making changes themselves.

Our findings suggest that for most of the categories of respondents, the tendency is to responding by dealing with the animals. Only Rehabilitators reported a strong tendency to respond to immediate demand by dealing with the people in the form of educating callers. Further, less than half the respondents reported that they undertook pro-active public education to prevent conflicts. These findings suggest that public education that might reduce the volume of demand for information and assistance from individuals is not currently being conducted as widely as it might be.

6.3.3 Lethal and Non-Lethal Responses

To decide the fate of the wild animals who provoke public demand for information and assistance, our respondents often cited well-accepted legal, regulatory, human health and safety, and humane concerns for their decisions to use lethal responses. However, a large minority did not (or could not) report how they decide in sufficient detail to understand what factors influence these animals fate. Our findings leave a great deal of uncertainty about why many of the wild animals who die were killed. One clear result is that many of our respondents kill healthy wild animals for lack of other options.

The questions in the survey about lethal responses and euthanization did not define these terms. The responses suggest that all methods respondents used to kill animals were reported to us as “euthanization” even though some of the methods specifically cited do not meet accepted standards for euthanization (for example the standards established by the American Veterinary Medicine Association). The nature of our data does not allow us to determine how many animals are killed by which methods. However, some methods that can cause significant animal suffering were reported used by some of our respondents.

A large minority of our respondents report they do not euthanize wild animals themselves. Euthanization of animal from these respondents adds additional demand to others; primarily veterinarians and secondarily shelters. This demand for euthanization services adds to the burden the ACO/Shelter category is bearing to meet the overall public demand for assistance with wildlife concerns.

7. Recommendations

In preparing this White Paper, the Animal Service Committee confirmed the informal impression of its members that public demands for information and assistance with wildlife concerns directly and significantly impacts the members of the Committee, most of whom are Animal Care and Control agencies of local governments, as well as other public agencies and private entities in MWCOG jurisdictions. Its impact on public agencies is of most immediate concern to MWCOG and its member governments. These member governments fund animal care and control activities as part of their public responsibilities. These agencies are mandated and funded primarily to handle domesticated species with only limited responsibilities for wild species specifically when there is a threat to human health and safety. However, the public is placing significant demand on these agencies, their contractors who in some jurisdictions provide sheltering services, and other public agencies to also provide services for wild species tangential to or totally outside their limited official responsibilities.

This demand is also impacting private entities, most significantly wildlife rehabilitators, who voluntarily provide a very significant amount of services to the public, often after that demand has been referred to them by others including by public agencies. While our survey did not include the general public, our results suggest by extension that local residents and businesses are also negatively impacted by the existing situation. Rather than clear understanding about where to turn for helpful authoritative information or direct assistance, local residents and businesses find a patchwork of entities with varying but limited responsibilities, missions, and resources who offer varying but limited services to help them deal with what residents and businesses perceive as significant and often urgent concerns about wild animals.

Even when members of the public negotiate the existing labyrinth of legal requirements, referrals, and sometimes conflicting advice, there are significant gaps in services available from any source, public or private. Both the difficulty for the public to find help when it is available and the gaps in services costs public agencies, private wildlife organizations and businesses, and residents real time and money. We should not overlook that these costs many wild animals a great deal more than time or money, but can often costs them unnecessary suffering or their lives. While people are the concern of MWCOG member governments, as a civil society, we must also consider the costs in animal death and suffering that could be avoided by addressing this confusion and gaps in services. Therefore, this section of the White Paper puts forward

several recommendations that can be implemented as separate actions or concurrently to address the impacts of public demand for information and assistance with wildlife concerns to benefit both people and animals.

7.1 Examples of What's Happened Elsewhere

While developing recommendations for action, the Committee researched how other North American communities are addressing this common issue to see what had been tried elsewhere and how these efforts had worked. This section presents information about just a few; these are in no way intended to be either a comprehensive discussion of all such examples or a suggestion that these examples are necessarily superior to others that could have been included if information had been available.

7.1.1 Toronto, Ontario

7.1.1.1 City of Toronto's Wildlife Strategy

The City of Toronto adopted a wildlife strategy (presented in Appendix x) in 1999 primarily in response to a new potential threat of raccoon rabies spreading into the area. The traditional approach for handling "nuisance" raccoons and other animals had been to trap and translocate. However, the Ontario Ministry of Natural Resources (MNR), the provincial agency similar to a US state wildlife agency, found in field studies that about three-quarters of translocated animals die and, further, that this practice aids in spreading disease including rabies. Ontario MNR's action plan for provincial wildlife, released in 1993, considered various ways of resolving human/wildlife conflicts in urban Ontario. MNR found that, while live trapping and removal of wildlife may appear to be temporarily successful in solving complaints, it does not provide a long-term solution to the problem. Therefore, MNR concluded that "to best resolve, minimize or eliminate human/wildlife conflicts, urban animal control services should emphasize effective public education and programs focused on changing the urban environment to prevent human/wildlife interactions and to promote ways in which people and wildlife can better co-exist." It was within this provincial context that the City of Toronto developed a wildlife strategy.

While the City was primarily concerned about just one disease in just one species, the City's wildlife strategy also addressed human/wildlife conflicts in general. The strategy is comprised of four components: Response to Nuisance Wildlife Concerns; Response to Wildlife

Threats to Public Health and Safety; Response to Sick, Distresses or Injured Wildlife; and Wildlife Education, Program Expansion.

Response to Nuisance Wildlife Concerns—Following the lead of their provincial MNR, Toronto animal control emphasizes dealing with nuisance wildlife concerns by educating the public to create an environment where both can co-exist free from conflict. When a resident is unable to resolve the conflict with the educational information provided, the strategy calls for an Animal Services Officer to visit the property to determine why the conflict continues and provide site-specific recommendations. Where the property owner has complied with all preventative measures and the problem still persists, the owner has the option of hiring a wildlife removal company (similar to NWCOs in the United States) or using a humane trap to capture the animal. Provincial law requires that trapped animals be released close to where captured; the guideline is generally within 1 kilometer.

Response to Wildlife Threats to Public Health and Safety—Toronto Animal Services responds when wildlife presents a real threat to public health and safety, including attempting to capture any animal that has scratched or bitten a person to have the animal tested for rabies. However, when an animal is perceived by the public to be a health and safety threat but there is no proof of such, the strategy directs Animal Services to educate the public to alleviate concerns or misperceptions instead of removing the animal.

Response to Sick, Distressed or Injured Wildlife—The strategy called for Animal Services to respond to reports of sick, distressed, or injured wild animals. Animals received may be turned over to a wildlife rehabilitator, released back into the environment, or euthanized.

Wildlife Education, Program Expansion—The main elements of the wildlife education program called for in the strategy encompass environmental changes, wildlife avoidance, responsible pet ownership, and mandatory rabies vaccination of dogs and cats. The Toronto wildlife strategy says, “One of the important education initiatives to decrease contact and conflict with wildlife is to inform people about changes they can make in their environment to reduce wildlife attractants,” especially food and shelter. Educating residents to properly store trash, a common food source for raccoons and other urban species, and on altering and maintaining their structures to reduce their use as shelter are important components of the strategy.

Additional public education messaging was recommended in the strategy to increase the public’s awareness of the unpredictable nature of wild animals and the importance of

maintaining a safe distance from all wildlife. Expanded educational efforts were also expected to advise pet owners about why supervising their pets is important to prevent disease spread. Public Health and Animal Services staff are supposed to ensure that all pet owners are aware of the requirement to vaccinate all dogs and cats against rabies.

Implementation—The Wildlife Strategy was adopted by the new City of Toronto very soon after the City was created in 1999 by amalgamating six municipalities. Prior to amalgamation, each of the six municipalities conducted animal services independently with varying policies and practices for dealing with wildlife. In at least one municipality, animal services officers responded to residents' request to pick up all trapped wild animals from residents' properties. These animals were either translocated significant distances from the trapping site or, in the case of skunks, euthanized due to rabies concern.

No proactive education was conducted to warn residents about the change in this pick up service stemming from the Ontario MNR plan and the City's Wildlife Strategy. Animal services reported that for residents formerly accustomed to this service, reaction to the change was initially negative. Instances of residents calling for pick up of wild animals who were already in traps on residents' properties were reported. Residents were advised to open the traps and release the animals. No information was collected, however, on what action residents actually took in these instances.

Residents in municipalities that did not provide pick up service prior to amalgamation generally accepted the new strategy more quickly. Residents who had been accustomed to pick up services also generally accepted it after they had time to adjust. All residents tended to respond well to the strategy's promise of long-term resolution of conflicts and its benefits for animal welfare.

Toronto Animal Services reports that seven years after the strategy was adopted, they continue to receive a significant volume of calls on wildlife. However, they handle many fewer wild animals. Animal services responds directly to some calls about sick or injured wild animals as well as to calls about animals that may be a threat to public health but only to these two types of wild animals concerns. Some calls about sick, distressed, or injured wild animals are immediately referred to others.

Calls about wildlife are handled by general dispatch staff who have only basic information about resolving conflicts by removing attractants and about determining when an

apparently sick, injured, or orphaned animal may need human help. Calls requiring more information are referred primarily to the Toronto Wildlife Centre Hotline, described in more detail below, and/or callers are advised they may contact a wildlife removal company.

The strategy specifies that Animal Services implement specific services to resolve wildlife conflicts. They are to educate residents on ways to resolve the conflict themselves and, if this was not sufficient to resolve the conflict, make on-site visits to evaluate the conflict and recommend further actions to resolve the conflict. Only after these two steps were residents supposed to be able to have an animal trapped. However, Animal Service is not implementing these portions of the strategy. They do provide some basic education to callers but beyond that, calls are referred to either the Wildlife Centre Hotline or to wildlife removal services. Animal Services currently makes no on-site visits to resolve wildlife conflicts.

Another component of the strategy called for increased public education. Toronto Animal Service educates the public through traditional means of printed brochures (which seven years after adoption of the strategy are only now nearly ready for distribution), information on the City's website, dispatchers giving callers basic information, and ACOs talking with people in the course of their normal work activities. Proactive education (public outreach, media outreach, PSAs) was not undertaken to implement the strategy.

When asked about implementing the strategy's provisions for resolving conflicts with wildlife, Toronto Animal Services said, "We're trying to get out of the wildlife business entirely." In common with most animal care and control agencies in North America, they feel they do not have the appropriate expertise to deal with wild species nor do not think they are adequately funded even to accomplish their primary missions.

A representative of a Canadian animal advocacy organization who has followed the Toronto Wildlife Strategy since its development remarked that City administrators had unrealistic expectations of significant cost savings in municipal animal services from amalgamation. When the six independent animal services agencies in each of the amalgamating municipalities were combined into one larger agency the overall budget was expected to be smaller than the combined total for those six agencies prior to amalgamation. Therefore, in the opinion of this advocate, Toronto Animal Services has been consistently under funded since amalgamation. If this is the case, it is not surprising that the agency is not able to undertake the additional activities required to fully implement the strategy.

7.1.1.2 Toronto Private Sector and Public/Private Partnerships

The City of Toronto is fortunate to be served by the busiest wildlife rehabilitation center in Canada, The Toronto Wildlife Centre, and a progressive, humane wildlife removal company, AAA Wildlife Control. The Toronto Wildlife Centre admitted over 4,600 wild animals in 2005, serving the entire greater Toronto region. Of particular interest is that in addition to the large number of animals receiving direct medical and rehabilitative care, Toronto Wildlife Centre's Wildlife Hotline believes it is the busiest of its kind in North America responding to approximately 30,000 calls a year. In addition to providing direct service to Toronto region residents, the Hotline, with assistance from The Humane Society of the United States, is developing a manual that will be available to other organizations developing or running wildlife hotlines. Funded almost entirely by donations and grants, the Centre receives less than 5 percent of its funding from government subsidy.

Toronto Animal Services reports that they rely on the Centre for a large number of wildlife-related concerns and refer a significant volume of calls to their Hotline. While this lessens the burden on Animal Services, it is not entirely satisfactory for the Centre who do not receive funding from the City of Toronto. This is especially the case since the City's Wildlife Strategy states that Animal Services is to provide services for wildlife conflicts that they are not, in fact, providing. The burden of this demand, therefore, is falling more heavily on this private charitable organization than it would if the strategy were fully implemented.

AAA Wildlife Control, in business since 1984 and currently Canada leading wildlife removal business, resolves wildlife concerns in a humane manner by educating property owners, offering preventative services or "wildlife proofing," and when necessary, hands-on removal of wildlife from structures. The company pioneered passive removal techniques, on-site release, and effective re-entry prevention measures. Removed animals are not relocated and nursing females stay united with their offspring.

AAA Wildlife Control offers training in both its field techniques and its business operations to others interested in operating similar wildlife services. The training program has helped U.S. non-profit organizations start affiliated wildlife control businesses. These particularly include wildlife rehabilitation centers. In addition to reducing the numbers of animals entering rehabilitation, these affiliated businesses have the potential to generate revenue

from profits that can be used to help support the non-profit activities of sheltering and rehabilitating animals.

In an effort unrelated to the City's Wildlife Strategy but reflecting an animal-friendly public culture, the City participates in a public/private partnership to save migrating birds who die and are injured in large numbers when they collide with buildings. Toronto is on a major migratory flyway and many birds of nearly every migrating species are injured and killed each year, especially during migration seasons, because bright city lighting attracts them towards buildings and/or confuses their sense of direction, luring them off their migratory path. Birds do not see window glass as the solid object it is but, especially when lighting behind the glass makes it appear they could simply fly though, will fly directly into windows at their full flight velocity. Many birds break their necks, dieing quickly. Other are injured or temporarily dazed. The injured and dazed birds frequently end up on city sidewalks where they are easy prey for predators, including feral and other free-ranging cats, and scavengers. Those birds found alive by people become additional burdens on local wildlife rehabilitators. The simple measure of turning out the lights when buildings are not occupied significantly reduces the number of birds harmed in this manner.

In 2005, the City adopted a lights-out policy after work hours in City-owned buildings. In 2006, the City launched Lights Out Toronto! in partnership with several private organizations and other government agencies. This public awareness campaign educates building owners, managers, and tenants to turn out lights, especially during migration seasons. A related policy incorporates the needs of migratory birds into the City's site plan review process for new building to encourage more bird-friendly lighting, glass, and other design features.

7.1.2 Harmony, Florida

Harmony is a new-built planned community near Orlando. Some neighborhoods and other facilities are currently completed and occupied, some are under construction, and additional neighborhoods and facilities are planned. Harmony calls itself an environmentally intelligent community where approximately 7,700 of its overall 11,000 acres of land will remain open space, including natural areas and both active and passive recreational areas. Development is being focused on previously disturbed land; former cattle pasturage, to minimize disturbance of native ecosystems. They additionally boast of their commitment to continuing conservation including employing a full-time conservation manager, restricting boating to electric and non-

motorized crafts, using Dark-Sky compliant outdoor lighting (lighting which produces no upward light pollution) that benefits night-flying animals, preserving a 31-acre gopher tortoise habitat, and maintaining a 2-acre endangered orchid preserve among other wildlife-friendly actions.

Homeowners purchasing in Harmony become subject to specific restrictions on their properties (covenants) and to their Homeowners' Associations' guidelines and goals that include several related to companion animals and to wildlife interactions. These restrictions, guidelines, and goals (presented in Appendix x) were developed in cooperation with The Humane Society of the United States. They state that the community's overall goal "is to promote the peaceful coexistence of … human and animal residents within the community while striking a balance between the preservation, use and enjoyment of Harmony's natural areas." They continue, "[a]nimals are treasured members of the Harmony community. Promoting the bonds between people and all animals, safeguarding the welfare of animals within the community now and in the future, and serving as a model to other communities for the humane treatment of all animals are guiding principles of Harmony."

Under the Harmony covenants, conflicts between humans and wildlife are to be resolved using nonlethal means unless there is extraordinary and immediate risk to the health, safety, or welfare of humans or companion animals. There are guidelines for developing a plan to resolve each conflict so that the least injurious and most effective approach can be taken. Emphasis is on changing human practices, modifying habitats, and /or modifying structural elements rather than removing animals. There are a number of additional requirements limiting feeding wildlife, prohibiting taming or rearing wild animals, specifying minimum euthanasia standards, and prohibiting purposeful harm or injury to wild animals, active nests, and critical habitat.

Harmony is not strictly speaking a municipality and does not provide public animal care and control services. However, when development is completed the HOA will function virtually as a local government in many respects. While Harmony relies on covenants and HOA rules to implement its wildlife policy, incorporated jurisdictions could implement similar policies with the tools that are available to them.

It is still early to gather much information about how these covenants are working in practice. [Note: this section may be expanded or revised after additional information is gathered on the initial implementation of these covenants.]

7.1.3 Central Ohio, Greater Columbus Area

The Ohio Wildlife Center (OWC) began as a wildlife rehabilitation organization in 1984 and has treated over 50,000 injured or orphaned wild animals since then. However, it was broadened its scope beyond just treating and rehabilitating animals. Like many rehabilitation centers, it runs a wildlife hotline and offers educational programs to children and adults. OWC recently also began offering humane wildlife conflict resolution services. Humane Wildlife Solutions is a fee-for-service business affiliated with OWC that offers non-lethal wildlife control services based on the AAA Wildlife Control of Toronto model.

The Columbus regions includes a number of municipalities; one is the small affluence suburban City of Dublin, Ohio. Dublin and the OWC formed a partnership in 2001 to serve residents with wildlife issues and concerns. OWC receives funding from the City in return for handling wildlife issues including wild animal emergencies and offering educational services to residents. Dublin residents are directed to call the OWC Hotline with wildlife questions. Additionally, Dublin residents may request an on-site evaluation of a wildlife conflict situation and get specific advice and recommendations to resolve the conflict. Implementing the recommendations is then up to the residents who may do it themselves or hire a wildlife service.

[Note: this section may be expanded or revised after additional information is gathered. In particular, contact with Franklin County Animal Control and with City of Dublin officials would be desirable to learn how they see this partnership and how well they feel it is working.]

7.1.3 Los Angeles, California

In 2004, the Los Angeles Animal Services Commission approved a new wildlife policy. It was motivated in part by California Fish and Game regulations that prohibited translocation. Because of this regulation, wild animals taken to City shelters were euthanized. The new Los Angeles wildlife policy made two major changes. First, licensed wildlife rehabilitators are allowed to respond to calls from members of the public about sick, injured, and orphaned wild animals and to pick up sick, injured, and orphaned wild animals directly from city animal shelters. Second, the City Animal Services Department will no longer issues permits to trap healthy wildlife that pose no immediate threat to public safety.

City Animal Services is now directed to refer all wildlife calls not involving distressed, sick, or injured wildlife or public safety issues to wildlife rehabilitators. Residents wanting an animal removed for any other reason are given an educational brochure explaining why trapping

is not necessary and further advised that, if they still want the animal removed, they will have to hire a private service. If residents bring healthy wild animals into the shelter, they will be requested to return the animal to the location where they found it and advised that if they leave the animal, it will be euthanized. Additional elements of the new policy increase the trap rental fee, notify residents applying for trapping permits that trapped animals must be either released on the property where trapped or euthanized, plan for Animal Services staff training on handling wild species, and plan to create temporary housing appropriate for wildlife waiting in shelters for pick up by rehabilitators.

[Note: this section may be expanded or revised after additional information is gathered. In particular, contact with City of Los Angeles Animal Services and with area rehabilitators would be desirable to learn how this policy is working in practice.]

7.2 Recommendations for MWCOG Jurisdictions

7.2.1 Data Collection and Reporting

7.2.1.1. Rational for Improving Data Collection and Reporting

Currently, the quality and accessibility of information about the issues this White Paper addresses varies widely, where it exists at all. Not all the entities who address public wildlife demand even collect data. For many, they only collect and report what they are legally required to; such as Maryland Wildlife Cooperators reporting annually the total numbers of animals trapped by species and the disposition of those animals. Most animal intake reporting from animal control agencies and shelters nationally lumps wild animals into a general “other” category that includes every species other than dogs and cats. The survey this White Paper reports on fills some data gaps for these issues but is limited to a single snap-shot in time on the questions it explored.

MWCOG jurisdictions could better understand the nature and quantity of demand placed on them and of the resources they are expending specifically to deal with that demand if they collected and reported this information. Data collected could support the case for changing the ways wildlife issues are currently handled. These data would also serve as a baseline for evaluating the effect of changes; to answer the important question of whether actions taken improved agencies’ operations, service to the public, and the lives of animals.

Data collection and reporting at the agency, organizational, and business level would benefit each agency and organization. Even more benefits could be expected from agencies,

organizations, and businesses participating in a regional data collection and reporting effort. Regional data may reveal trends and allow reporting entities to compare their experiences with others' to identify opportunities for improvement and cooperation.

MWCOG jurisdictions' animal service agencies are currently considering participating in a regional data collection and reporting effort. Based on a national model called the Asilimar Accords, this effort is expected to benefit agencies and the pubic by increasing transparency of animal services operations and by allowing for "apples-to-apples" comparisons of outcomes for animals. As implementation proceeds within MWCOG jurisdictions, data on wildlife concerns can be added to this effort. The addition of wildlife-specific data collection may most appropriately be implemented as a second phase, after data collection on companion animals is underway.

7.2.1.2 Data Collection and Reporting Recommendations

1. MWCOG jurisdictions animal care and control agencies voluntary collect and report information on their activities relating to wildlife such as intake and disposition of animals by species, volume and nature of inquiries and requests, action taken in response to inquiries and requests, and similar activities.
2. MWCOG jurisdictions animal care and control agencies add wildlife data collection and reporting to the planned regional data collection and reporting effort for companion animals.
3. The Animal Services Committee approach wildlife rehabilitators and NWCOs in the MWCOG region and solicit their voluntary participate in regional data collection and reporting.

7.2.2 Public Agencies' Policies

7.2.2.1. Rational for Developing and Adopting New Policies, Updating Existing Policies

Appropriate policies for addressing wildlife-related public demand can guide public agencies' activities in the most rational, efficient, and beneficial direction. The survey this White Paper reports on is not sufficient to provide a full review of existing policy. The responses to it, however, were adequate to indicate that there is variation across the jurisdictions on how they are handling wildlife-related demand. Therefore, it suggests variation in policies on this activity across jurisdictions.

Policy differences between jurisdictions can create confusion for the public as the try to negotiate available services. It may also shift demand between agencies or from public agencies to private organizations or vice versa creating incentive for each category of entities to forego offering to help the public with wildlife information for fear that they will bear a disproportionate burden. To the extent agencies have discretion to do so, harmonizing policies throughout the region could reduce public confusion and avert demand shifting. Working together as a region through MWCOG could be an efficient route to help local jurisdictions identify and implement the most efficient and beneficial policies.

7.2.2.2. Recommendations for Public Agencies' Policies

1. MWCOG jurisdictions' public agencies review existing policies relating to handling demands for wildlife information and assistance for each jurisdiction.
2. The Animal Services Committee identify best practices regionally, nationally, and/or internationally that may be appropriate to emulate to develop model policies for handling demand for wildlife information and assistance.
3. The Animal Care and Control Committee recommend adoption of model polices by MWCOG jurisdictions animal care and control agencies.

7.2.3 Targeted Public Education

7.2.3.1. Rational for Targeted Public Education

The survey results strongly suggest a substantial lack of basic knowledge about common wild species among members of the public, such knowledge of what constitutes normal behavior and what is a threat. In addition to creating demand for this basic information itself, lack of basic knowledge can create demand for inappropriate services, such as demands to remove animals who are not real threats, when ignorance or incorrect information prompts people to believe such services are necessary. Some general public education was reported by our respondents. Much of it is being delivered through direct individual education. Animal control dispatchers, ACOs, and wildlife rehabilitators are educating one person at a time by phone or in person. While this level of individual service is beneficial to the individuals who receive it, it is extremely resource intensive.

Direct individual public education is not seen as the primary mission of any of our respondents. Even the one respondent who runs a wildlife hotline, does so primarily to triage wildlife rehabilitation demand although direct public education is a frequent activity for hotline

volunteers. The national animal welfare organizations among our respondents conduct public education as part of their missions. However, it is only one of their many activities and is aimed at a national audience, not focused on the Washington, DC, region. Local animal care and control agencies, shelters, and wildlife rehabilitators, even though they do not see general public education as their primary mission or responsibility, will be the ones who will most benefit if public demand for basic information can be met by efficiently increasing basic knowledge among the general public.

MWCOG jurisdictions animal care and control agencies, shelters, and wildlife rehabilitators could work cooperatively to develop a public education program targeted at communicating the basic information that is most widely lacking and that is most frequently repeated individually. Demand generated by animals in yards behaving normally for their species, animals such as raccoons and foxes out in the daytime, and young animals without parents obviously tending them can be met with simple authoritative factual information. Greater basic knowledge about these and similar topics throughout the general public will correspondingly decrease demand for this basic information, and decrease demand for inappropriate services created by lack of this information, placed on agencies, shelters, rehabilitators, and businesses.

In considering lack of basic information among the general public, animal services agencies, organizations, and individual rehabilitators and businesses may initially feel overwhelmed by the sense that there are simply too many uninformed or misinformed people to make effective change. However, another way to view the public is to see it as a large untapped resource. Members of the public can be effective educators of others. Compared to the existing situation, it can be a more efficient use of limited resources to educate a large number of people through targeted public education than to educate members of the public individually. This is not to say that implementing a targeted public education program will eliminate individual demand; but it would be expected to reduce the demand created by the lack of basic knowledge.

Many local, regional, and national organizations have created informational messages for the public about wildlife. Some examples are presented in Appendix x. The content of these messages is available to adapt to a MWCOG regional program. However, the delivery of these messages offered by a multitude of agencies and organizations is, by default, typically static. While websites can be tremendously informative, they presume an existing interest on the part of

the user to seek out information there. Similarly, pamphlets and flyers are typically placed at shelters and veterinary clinics, limiting the information's exposure to a small segment of the general pubic; typically a segment that is already more knowledgeable and/or more motivated to act humanely towards animals then the public at-large. To maximize the value of public education, it is fundamentally imperative to adopt a proactive delivery system.

Much of the material currently available is consistent in content. However, the presentation and messaging vary greatly. By adopting a regional approach to messaging and "branding" regional wildlife information as coming from a local authoritative and trusted voice; the voice of animal care and control agencies, shelters, wildlife rehabilitators, and similar partners, the messages' effectiveness and effect can be significantly improved.

7.2.3.2. Recommendations for Targeted Public Education

1. A public/private partnership potentially including MWCOG jurisdictions animal care and control agencies, other government agencies, sheltering organizations, wildlife rehabilitators, national animal welfare organizations with regional affiliations, local and regional animal welfare and wildlife organizations, wildlife related businesses, and any other like-minded public and private entities be formed to undertake a targeted public education program.
2. MWCOG Animal Services Committee review existing public education efforts by member agencies and others for examples of best practices that may be adopted regionally.
3. Proactive delivery systems be the primary route of delivery including such things as public services announcements on radio and TV, targeted advertising such as radio and TV traffic sponsorships, print advertisements, press releases and other media outreach, compelling visual signage, posters, and flyers in places and at events to achieve greatest exposure especially to segments of the public less likely to be reached by existing static messaging.

7.2.4. Professional Education

7.2.4.1. Rational for Professional Education

The need for professional education of animal care and control professional and police officers is generally very well accepted. However, training specific to the wildlife-related responsibilities these personnel hold and to the additional wildlife-related activities many

undertake is not as common. For police, appropriate wildlife-specific training may include initial and in-service training on when and how to use a firearm to field euthanize injured or sick animals. For ACOs and sheltering staff, it may include in-service training on educating the public to resolve conflicts with wildlife without trapping, translocating, or euthanizing or capture and handling techniques as they differ from domestic species.

Wildlife rehabilitators are required to obtain continuing education in order to maintain their rehabilitation licenses. Many take advantage of training offered by national and international rehabilitator associations. While many rehabilitators are extremely knowledgeable about ways to prevent or resolve wildlife conflicts, not all rehabilitators are as well informed on this topic. Nor do rehabilitators necessarily have public education skills, even though they do a great deal of public education. Increasing the availability of education for rehabilitators on both conflict resolution and public education skills could increase the effectiveness of this group's existing significant efforts to educate the public.

Currently, regulation of NWCOs in both Maryland and Virginia is evolving. Either recently or in the near future, NWCOs in both states have been or will be subjected to new state requirements. [Note: this section may be revised when additional, up-to-date information is available about the status of NWCO regulation in Maryland, Virginia, and the District of Columbia.]

Further, professional education specifically for NWCOs is a new field. In the past and to a great extent still today, NWCOs were trained specifically in trapping either in state wildlife agencies' programs or by working trappers. This training emphasized techniques from fur trapping experience. Little other formal training was available specifically for NWCOs until recently. Training specific to resolving wildlife conflicts without trapping, "wildlife proofing" structures to prevent conflicts, and similar non-trapping specific topics were and continues to be relatively less will covered. Activities of this profession create additional demand on animal care and control agencies and on wildlife rehabilitators when they bring trapped animals to shelters to be euthanized or young animals to rehabilitators after their mother was previously trapped and killed. Therefore, it is appropriate for MWCOG jurisdictions to take an interest in ensuring NWCOs working in their jurisdictions are required to, or at least have the opportunity to, learn about these non-trapping topics.

7.2.4.2. Recommendations for Professional Education

1. MWCOG jurisdictions' animal care and control agencies and police department review existing professional training offered and/or required on their wildlife-related responsibilities and activities.
2. The Animal Services Committee identify best practices regionally and/or nationally that may be appropriate to emulate to develop model policies on professional education.
3. MWCOG jurisdictions' animal care and control and police formally include training on their wildlife-related responsibilities and activities in existing professional education where such training is not currently required and/or offered.
4. MWCOG jurisdictions' work with state and District regulators towards requiring professional education for NWCOs who operate in the MWCOG region so that these private businesses are resolving wildlife conflicts and other wildlife-related concerns in manners that best serve the public and the animals and that do not create additional demand on public agencies or other private entities.
5. The Animal Services Committee explore the potential for partnering with rehabilitator groups or organizations to offer and/or encourage increase availability of training for rehabilitators on educating the public on humane ways to resolve wildlife conflicts and on public education skills.

7.2.5 Identifying and Fielding Existing Resources

7.2.5.1. Rational for Identifying and Fielding Existing Resources

The MWCOG region contains many excellent resources for information and assistance with wildlife issues. These resources run the gamut from physical facilities and other assets through skilled and knowledgeable human resources and working programs to authoritative information sources. However, information about existing resources, especially identifying the most appropriate resources for a specific concern, is not as widely known as it could be. A simple up-to-date inventory of the animal-related resources within the region would be very beneficial to all public and private entities dealing with the public on wildlife issues. The Northern Virginia Wildlife Rescue League has undertaken such an inventory for their service area; primarily covering northern Virginia resources. [Note: The status of this inventory and its coverage is not certain, however, it may be an excellent starting place for a regional inventory. This section may be revised when additional information is obtained about this WRL effort.]

There are also many resources that are not specific to animal concerns and are not held or primarily used for animal-related activities. However, some of these resources held by government agencies, private organizations, and businesses could be used in partnership with animal welfare agencies and organizations to further the goals of White Paper recommendations. For example, state and county highway and roads department have programmable signage, some fixed and some portable, typically used to warn of specific traffic impacts or problems. When not in use for this purpose, such signage is typically simply turned off. However, during the periods of greatest deer crossings, such as the fall rut at dusk, signs not needed for traffic warnings could be deployed and programmed to warn about the greater likelihood of drivers encountering deer in the road. There are potentially many examples of such innovative use of other existing resources.

7.2.5.2. Recommendations for Identifying and Fielding Existing Resources

1. The Animal Services Committee inventory existing animal-related resources in the MWCOG region and make this inventory widely available to public agencies and private entities dealing with the public on wildlife concerns as well as explore how to appropriately make the information in the inventory available directly to the public.
2. The Animal Services Committee research potential innovative uses of existing resources held by MWCOG jurisdictions' public agencies, including non-animal related agencies, private organizations, businesses, and other.

7.2.6 Regional Wildlife Hotline

7.2.6.1. Rational for Regional Wildlife Hotline

The results of the survey this White Paper reports on clearly demonstrates that, while all but one of the respondents do not purposefully operate a wildlife hotline, most of our respondents are in fact expending significant resources operating something very much like a hotline in practice. It is not practical for animal care and control agencies, sheltering organizations, and others to simply turn away from the public's wildlife demand. The public will continue to make that demand, regardless, and more resources will be expended in the long run by continuing the existing patchwork of services than would be used by rationally addressing this demand. One obvious way to address this demand is to offer one consolidated source of information and referrals in the form of a regional wildlife hotline. A single first point of contact for wildlife concerns would relieve existing agencies and organizations of much of the burden

they are currently bearing for wildlife concerns. A single first point of contact would significantly reduce the amount of information other agencies and organizations would need to keep available and up-to-date on these topics and staff training required as they would be able to direct calls to this single, knowledgeable source.

Section 2 of this White Paper summarized information about a number of wildlife hotlines operated across North America. Currently, the Northern Virginia Wildlife Rescue League (WRL) operators a hotline in the MWCOG region. However, it is not the intent or mission of this organization to be a public service to the entire region on all wildlife questions. Their hotline's main purpose is to triage wildlife potentially needing rehabilitation. Nor, very significantly, is WRL currently funded to expand their volunteer-driven efforts to take over a larger role.

The federal USDA, APHIS, Wildlife Services offices for the states of Maryland and Virginia accept phone calls from the public on many of the issues covered by this White Paper. However, they are not mandated or funded to handling all of the public's wildlife-related questions, especially questions outside their federal mandate to protect property and human health and safety from animal damage. Therefore, many of the most basic questions and concerns about the welfare of individual animals that occupy much local agency and rehabilitator time are not Wildlife Services' main focus. Additionally, staff of this agency spend significant time away from their phones engaged in wildlife control activities. Therefore, phone calls are returned as staff are available; not necessarily as quickly as members of the public demand or as quickly as they can reach local animal care and control staff, sheltering staff, or rehabilitators.

There are potentially many options to operate a regional wildlife hotline. Hotlines can be answered live by staff in dedicated space with dedicated phones and computers. Or hotlines can be operated remotely with callers leaving messages that are returned promptly by staff retrieving messages from any location. MWCOG could operate a hotline itself. Or, one MWCOG jurisdiction agency could operate a hotline to which other jurisdictions refer calls and contribute funding.

Alternatively, MWCOG collectedly or its member jurisdictions individually could contract for hotline services from an existing hotline. WRL's hotline may be considered for this type of arrangement if they are interested and able to expand into offering this service. Hotline services could be contracted from a vendor who is not currently operating a hotline but with

potential to development one such as another rehabilitation center or organization or a NWCO. Such a hotline would not necessarily need to be located in the MWCOG region. An existing hotline with the required expertise for advising the public on humane wildlife conflict resolution and on triaging wildlife for rehabilitation, the basics for most hotlines, could readily be provided with regionally specific information to make appropriate referrals.

As an alternative or supplement to a hotline, MWCOG or its member jurisdictions could develop an automated system as a first point of contact for wildlife concerns. An automated attendant could direct callers initially to a library of recorded tips and answers to frequently asked questions before directly calls to agencies or rehabilitators. Such a library could also be available for agencies to refer or transfer calls to when they are contacted directly with common non-urgent wildlife questions.

7.2.6.2. Recommendations for Regional Wildlife Hotline

1. Animal Services Committee investigate options for providing hotline services and develop a plan to implement a MWCOG regional wildlife hotline.
2. MWCOG assist member jurisdictions to identify and work with potential hotline operators who could be contracted to provide hotline services on behalf of jurisdictions.

7.2.7 Comprehensive Community Animal Services

7.2.7.1. Rational for Comprehensive Community Animal Services

All MWCOG jurisdictions offer extensive, high-quality public animal care and control services to the public for companion animals, other domesticated species, and animals threatening human health and safety. Therefore, many will say that these jurisdictions already have comprehensive community animal services. Indeed, compared to the situation for animal care and control in even the recent past and in many other places, MWCOG jurisdictions are very well served. However, the public demand for services related to wild animals is clearly not being adequately met.

This White Paper has explored this situation and put forward recommendations to address some of the negative aspects of this situation, in particular the impacts on public agencies. The recommendations put forward to this point do not represent sweeping change but ways to improve, enhance, and expand existing activities to improve the situation.

It is also appropriate here to consider a broader approach to addressing this situation; to perhaps see this not as a burden to be removed but an opportunity to better serve the public and

animals. Local governments could accept that public demand for help with wildlife-related concerns is a valid demand for them to fulfill and make some wildlife services part of local government-provided animal services with necessary funding to carry it out. Local services would not duplicate or conflict with state wildlife authority but would focus on the un- and underserved concerns identified in this White Paper; preventing and resolving wildlife conflicts and concerns about wild animals who may be injured, sick, or orphaned.

To a greater or lesser degree, with more or fewer resources, and well or poorly, local public agencies are already performing these tasks in response to public demand. These agencies could be authorized and funded specifically to do so. This would provide the public with significantly improve services in this area and benefit many wild animals. It would also benefit local agencies who would be able to plan programs and depend on funding instead of squeezing resources to meet wildlife-related demand out of existing budgets appropriated for other purposes.

7.2.7.2. Recommendations for Comprehensive Community Animal Services

1. Animal Services Committee investigate options for including wildlife-related services specific to preventing and resolving wildlife conflicts and concerns about injured, sick, or orphaned wild animals as part of local government animal care and control activities.
2. Animal Services Committee investigate options for local governments to offer wildlife-related services specific to preventing and resolving wildlife conflicts and concerns about injured, sick, or orphaned wild animals through agencies other than existing animal care and control agencies or through contractors.

Table 2.2
Examples of Hotlines Filling Public Demand for Information and Assistance with Wildlife

Organization	Nature of Organization	Area Served	Population of Area Served	Volume of Calls (annual)	Volume of Calls per 1,000 population	Nature of Calls
Wildlife Orphanage, Inc.	Non-profit wildlife rehabilitation center with recently-opened affiliated humane NWCO business	LaPorte, St. Joseph, Elkhart, and Porter Counties in northwestern Indiana	705,254 (2000 Census)	760 (2002)	1.1	Orphaned or injured young animals; Wild animals intruding in buildings
The Humane Society of the United States, Urban Wildlife Field Office	Non-profit, national animal welfare organization	Connecticut	3,503,604 (2004 Census Bureau estimate)	5,721 (2004)	1.6	A little more than half of calls are about injured or orphaned wild animals, about 40 % about nuisance wildlife
Toronto Wildlife Centre	Non-profit wildlife rehabilitation center	Metro Toronto, Canada	4,682,897 (2001 Statistic Canada census)	≈30,000 (2004 estimate)	6.4	Two most common types of calls are 1) sick, injured, or orphaned wild animals and 2) nuisance wild animals. Also get calls for general information (identify whether snake is poisonous, normal behavior for observed species) and reports of wild animals needing immediate rescue from hazards
The Ohio Wildlife Center	Non-profit wildlife rehabilitation center with recently-opened affiliated humane NWCO business	Central Ohio, Columbus and surrounding communities including a contract to handle calls for the City of Dublin	1,675,680 (2005 Ohio Department of Development estimate for Franklin, Delaware, Union, Madison,	≈25,000 (2005 estimate)	14.9	All types of wildlife inquiries except those involving animal/vehicle collisions

			Pickaway, Fairfield, and Licking Counties)			
Wisconsin Humane Society Wildlife Rehabilitation Center	Non-profit wildlife rehabilitation center with recently-opened affiliated humane NWCO business	Milwaukee and surrounding metropolitan area, Wisconsin	1,709,926 (Milwaukee Journal Sentinel, April 14, 2005 reporting Census Bureau estimate for five-county metropolitan Milwaukee area)	12,406 (2005) 11,416 (2004) 4426 (2005 calls to Tip-Lines, recorded messages on frequently asked questions) 1,211 (2005 calls to affiliated NWCO business)	10.6	Not reported
Urban Wildlife Rescue	Non-profit wildlife rehabilitation center with recently-opened affiliated humane NWCO business	Denver and Aurora, Colorado Metropolitan Area	2,179,240 (2000 Census)	≈5,000 (2004)	2.3	Wild animals in buildings, orphaned and injured wildlife, wild animals with young denning in building
Wildlife Rescue Center of the Hamptons	Non-profit wildlife rehabilitation center	Suffolk County on Long Island, New York	1,475,488 (Census 2004 estimate)	≈10,000 (no year specified)	6.8	Nuisance wildlife, orphaned and injured wild animals
WildCare	Non-profit wildlife rehabilitation center	Marin County and City of San Francisco, California	997,727 (Census 2003 and 2004 estimate)	≈12,000 (no year specified)	12	About equally orphaned and injured wild animals and wild animals in buildings
DFW Wildlife Coalition	Non-profit wildlife rehabilitation center with recently-opened affiliated humane NWCO business	Dallas and Fort Worth, Texas, Metropolitan Area	5,221,801 (Census 2000)	>3,000 (2005)	0.6	About half of calls are injured or orphaned wild animals, about one-third are nuisance wildlife calls including animals in buildings, remainder are general questions and situations that only require giving caller advice to resolve themselves.
Northern Virginia Wildlife Rescue	Non-profit network of home-based wildlife rehabilitators	Northern Virginia; Cities of Alexandria and	1,916,001 (Census 2003 and 2004	≈9500 (2004)	5.0	Injured and orphaned wild animals (about 70 %), nuisance

League		Fairfax, Counties of Fairfax, Arlington, Loudoun, and Prince William	estimates)			animals (about 13 %), remainder general questions or situation was not recorded
Wildlife Response, Inc.	Non-profit network of home-based wildlife rehabilitators	Hampton Roads/Virginia Beach area of southeastern Virginia: Cities of Suffolk, Portsmouth, Norfolk, Chesapeake, Virginia Beach, Hampton, and Poquoson	1,226,186 (Census 2004 estimate)	>13,000 (August 2004 to August 2005)	10.6	>5,000 calls about injured or orphaned wild animals, remainder of call all other situations
USDA, APHIS, Wildlife Services, Maryland State office	Federal government agency	Entire state of Maryland	5,558,058 (Census 2004 estimate)	2,643 (2004)	0.5	Technical assistance projects (personal visit, telephone, written communication) involving all types of wildlife but not including projects in which Wildlife Services provided direct control of wildlife
USDA, APHIS, Wildlife Services, Virginia State office	Federal government agency	Entire state of Virginia	7,459,827 (Census 2004 estimate)	1,284 (2004)	0.2	Technical assistance projects (personal visit, telephone, written communication) involving all types of wildlife but not including projects in which Wildlife Services provided direct control of wildlife

This is necessarily only a partial listing of all the many public and private organizations that offer information, advice, and assistance to the public on wildlife concerns. In particular, a very large number of wildlife rehabilitation center and individual rehabilitators field calls primarily about injured and/or orphaned wildlife; many of these label their numbers as “Wildlife Hotlines”. The hotline services in this sample generally handle a wider range of concerns.