



Urban Wildlife News

The Newsletter of the Urban Wildlife Working Group of The Wildlife Society

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www.rw.ttu.edu/urbwlf/

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From the Working Group Chair

Greetings Urban Wildlife Working Group members:

I hope your 2012 is off to a great start! At the annual meeting last November, held during the TWS annual conference, the Chair's torch was passed from Chris Moorman to me. Over the past 2 years, Chris accomplished many things and he has left the working group in great shape. The bar has been set high, and I will try to maintain that leadership for the next 2 years.

In addition to the shift in the Chair position, we also reported our election results at the 18th annual meeting of TWS (by electronic ballot, for the first time). Bob McCleery moves over to the Chair-elect position, Nils Peterson is now Secretary-Treasurer. New board members include Richard Heilbrun and Marne Titchenell. Welcome to the Executive Committee. I would like to thank all those that agreed to run for elections and encourage members to consider running for a position in the next elections. It is relatively painless.

For those members that were unable to make the TWS annual conference, you should know that the UWWG displayed a strong presence. Ray Sauvajot and others put on an excellent full day field trip, sponsored by UWWG, in which we were able to see a variety of amazing locations and wildlife (native and exotic!). The UWWG also sponsored a symposium 'Wildlife and roads in urban ecosystems: Challenges and opportunities', which covered everything from turtles to bears. The symposium was well attended, even though the temptation was to get outside and enjoy the ocean.

(Continued on page 9)

Authors:**Mark Weckel,
Chris Nagy****Mianus River
Gorge Preserve****Gotham's Furriest: Coyote Colonization of New York City**

On December 15, 2011, New York City (NYC) local TV station WPIX 11 News reported that a group of coyotes was terrorizing local residents of a Queens community. The story was what you would come to expect: sensational, confrontational, and utterly uninformative. There was a story there, but unfortunately, the reporter missed it.

This Queens coyote - let's call him Frank (yes, he is a boy) – has resided in a 6.5 ha wooded park near John F. Kennedy Airport since at least 2009. Since then, residents of an adjacent housing complex have occasionally photographed the coyote traversing their parking lot. When we arrived to deploy camera traps to “officially” document Frank, neighbors informed us about the coyote as soon as we stepped out of the car. One man we spoke to said he frequently sees the coyote and that it often eats food left out by his neighbors for stray cats. The people we spoke to were generally pleased, or at least intrigued, to have an interesting animal in their midst.

This part of Frank's story is typical of the urban coyote. Despite reports of packs, we believe Frank is a loner. He quietly made his entry years ago. Over time, he's gotten used to living close to humans, some of which inadvertently



A candid photo of “Frank” taken at an undisclosed park in Queens. Photo courtesy of Mianus River Gorge Preserve, Inc.

feed him. Eventually, this type of habituation could lead to a coyote problem. But Frank owns at least one distinction: He is our first documented resident Long Island, NY coyote.

While most native New Yorkers refuse to admit it, the NYC borough of Queens is on Long Island. The Island is one of the largest land masses in the north-

east that – as far as we know – does not support a coyote population. Yet the Long Island counties of Nassau and Suffolk are dominated by suburban development and numerous large open space parcels and would make great habitat for eastern coyotes. To get to Queens and the greener pastures beyond, a dispersing coyote has to either swim the Long Island Sound or cross one of several large bridges that connect the boroughs to each other and the mainland. All these routes require braving dozens of kilometers of Gotham’s concrete jungle.

For the past two years, we have been leading an effort to document coyote site occupancy and colonization in the NYC metropolitan area. Researchers from a number of local conservation organizations, including the Mianus River Gorge, the Wildlife Conservation Society, and Pace University have set up cameras across 25 parks in the NYC metropolitan area. Our goals are to predict which parks are most likely to support coyotes and identify corridors. Coyotes are already widely distributed across most of the Bronx, NYC’s only mainland borough, and Manhattan Island sees a few dispersers on occasion. Long Island is coming and we hope to document this substantial range expansion in real-time.

The colonization of Long Island is an amazing opportunity for academics, but it is also a real problem for land managers. The urban coyote has quickly forced us to rethink our perception of what is traditionally considered habitat. City and suburban dwellers do not expect to share their open spaces with coyotes. The coyote is a creature of the American West, not their backyard. Arguments for the coyotes filling a vacant ecological niche will fall on deaf ears when the public concern is ultimately the safety of their pets and children. In the end, the public will determine the fate of the urban coyote. Hopefully wildlife professionals in NYC can get in front of this issue with education campaigns before a negative encounter with a coyote drives the narrative.

“Researchers from a number of local conservation organizations, including the Mianus River Gorge, the Wildlife Conservation Society, and Pace University have set up cameras across 25 parks in the NYC metropolitan area.”

Author:**Green Roofs, Raingardens, and Butterfly Gardens - Urban Wildlife “Naturals!”****Dan Svedarsky,
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tainability,
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of The Wildlife
Society**

A few years back, I was attending an Audubon conference in Milwaukee and was intrigued by a paper title on butterfly gardens. Humm, that sounded kind of interesting. I went and was inspired so I returned to campus, cranked up the sod cutter out front of the natural resources building, googled a list of butterfly plants, and the University of Minnesota Butterfly Garden was launched! No more than 15 minutes after planting a purple cone flower with a single flower, a Monarch butterfly descended for a nectar visit, so we knew we had the right spot and the right plant. From those humble beginnings the butterfly garden has matured, the surrounding area has developed into the “Nature Nook” – a microcosm of Minnesota’s 4 biomes, a pond with a waterfall flowing in season, and the area has become a campus attraction for visitors and the campus community. But the butterfly garden is the center of attention. One day a local campus supporter was touring the Nature Nook and asked, “*Svedarsky, do you have a sponsor for this butterfly garden?*” I said no, but we do now after the generous lady established an endowment fund for the “Shaver Butterfly Garden,” in tribute to her parents. Interest funds from the endowment partially support a summer intern who helps with the maintenance of the Nature Nook and other campus gardens.

Butterfly gardens seem a natural to establish in backyards, urban and otherwise. Who among us doesn’t like butterflies? Well, maybe not Imported Cabbage Butterflies if we are trying to grow broccoli. Butterfly gardens provide a wonderful way to connect with kids, especially if Monarchs are in the neighborhood. What better example of a life cycle than Monarchs, complete with dramatically colored larvae and chrysalis? And you can even tie in the mimicry piece with Viceroy and the migration part to include the importance of international conservation in safeguarding wintering grounds. At the Nature Nook, our Department naturalist includes kids to help tag some newly emerged adults; and even got the Chancellor involved once.

Along with butterfly gardens, one can develop multi-purpose raingardens complete with a botanically diverse array of plants, to include milkweed and other butterfly plants.

Raingardens of one sort or another are being installed in urban areas everywhere to treat and reduce stormwater runoff and improve water quality in the receiving water body. The nature education value is limited only by the imagination of the installers. An impressive raingarden project was carried out in 2010 in South Minneapolis when the Metro Blooms group mobilized citizens to install over 100 raingardens to safeguard Powderhorn Lake. The “turning ideas into action” dimensions of this project was impressive as well as the associated habitat values. Please see the following for more information:

http://metroblooms.org/raingarden_video.php. <http://www.youtube.com/watch?v=F1OfEX6Wibw>

While attending the Copenhagen Climate Conference in 2009, I had the opportunity to tour the Augustenborg District of Malmo, Sweden. A series of raingardens, green roofs, and catchment basins have functionally reduced the stormwater runoff by 60% and increased the biodiversity by 50% (including nesting birds). <http://sustainablecities.dk/en/city-projects/cases/augustenborg-green-roofs-and-stormwater-channels>. Again, another impressive example where the ecosystem services of re-constructed nature can greatly benefit urban dwellers (prevented the city from needed to do the costly task of separating the storm and sanitary sewer systems) while providing nature experiences close by.

If we build things with habitat values in urban settings, nature will come; but creative design is important as always in attracting the “good” stuff and minimizing the bad, while maximizing the good will of the community. The opportunities to connect children with nature in developing these projects are many and the urban wildlife environment will be the better for it. Have fun!

Dan Svedarsky, Vice-Chancellor Tom Baldwin, and donor June Shaver in UMC’s Shaver Butterfly Garden.



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*Leslie is running
for President-elect
of the Oregon
Chapter of The
Wildlife Society*

Student Research Highlight

I began my research with a broad interest in urban and road ecology and have since found a passion for discovering and enhancing wildlife habitat linkages, particularly in urban habitats. Previous research I have conducted has been focused on issues of road ecology such as identifying species preference for different under-road passage designs as well as qualifying use of passages and road avoidance behavior with wildlife activity in near road habitats. I have been examining these questions at a community level monitoring for as many species as possible including mammals, reptiles, amphibians, and various bird species. The research I would like to profile here comes from a need to document the influence of artificial light on wildlife use of undercrossing structures.

It is well known that artificial light severely disrupts migratory behavior in birds, sea turtles and bats among other species however many common terrestrial species remain unstudied. The movement and activity patterns of terrestrial animals in the presence of artificial light are needed to inform mitigation of habitat fragmentation in the face of expanding urbanization. Wildlife crossing structures can help mitigate habitat fragmentation by roads but some crossing structures are proposed as dual-use (for use by foot or bike traffic as well as for wildlife) and typically would include artificial light.

This project is being conducted in the Coffee Creek wetlands in Wilsonville Oregon at the Boeckman Road extension project, specifically within the large bridge structure. This bridge structure was designed solely for water and wildlife passage. The experiment has been established in three ~30 m long sections where previous research has shown frequent use by wildlife. On a weekly basis each section was subjected to either high ~10 foot candles (fc), low ~5 fc, or no light. Sections are monitored using sand tracking to determine use. Light treatments were rotated in a Latin square design to account for unequal use of each section by wildlife. After three weeks all lights were turned off for one week before rotations began again. Two full rotations have been collected so far and

data collection will continue this spring as water levels in the wetland subside.

A strong pattern of avoidance of artificial light is developing in deer mice detections and we have also noted possible similar trends for mink and vole. As data collection continues it is not yet clear if trends will also develop in the 14 additional species detected, however given the data thus far it is clear that for some species habitat connectivity is disrupted by the presence of artificial light.

I will be presenting a poster on this research at the Urban Ecology Research Consortium (UERC) conference at Portland State University in late January and will likely submit abstracts at additional conferences, particularly as additional data is collected.

If you have any questions about my research, the Oregon Chapter of TWS or anything else that may have piqued your interest please feel free to get in touch with me!



Author:**Travis Longcore****Associate Adjunct Professor
UCLA Institute of the Environment and Sustainability****UCLA Undergraduates
Tackle Urban Wildlife Research Projects**

Students in the UCLA Environmental Science BS degree program have undertaken urban wildlife research projects as part of a senior capstone experience designed to provide "real world" experience. The group research projects are implemented for an off-campus client over the course of a year-long program and involve original research.

In 2009-2010, the National Park Service (including working group member Seth Riley) requested investigation of rodenticide application of residents on the urban-wildland interface. Two teams totaling 12 students distributed over 1,600 fliers to households in neighborhoods adjacent to Santa Monica Mountains National Recreation Area and received 60 valid responses to the associated online survey. Students conducted a similar phone survey of Pest Control Operators (PCOs). Homeowners (as opposed to gardeners or PCOs) were the primary applicators of rodenticides, predominantly second generation anticoagulant rodenticides (SGARs), and some residents reported improperly applying rodenticides (e.g., exceeding prescribed distances from structures). In one instance a respondent reported observing dead animals outside after placing poison inside a structure. The students concluded that improper application of SGARs that ignores label guidelines occurs in neighborhoods along the urban-wildland interface, thereby providing a transmission pathway for chemical rodenticides to reach native wildlife.

In 2010–2011, the Mountains Recreation and Conservation Authority asked for a study of wildlife use of an underpass that is part of a highly significant linkage between wildlands in the greater Los Angeles region that is threatened by development on one side. With much appreciated assistance of expertise and equipment from working group member Erin Boydston of the USGS, the 6 students installed seven cameras near and under the underpass, and three cameras as controls up to 1 km from the underpass, in protected lands. Following 429 trap-

nights, the photographs showed use of the area by coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), bobcat (*Lynx rufus*), striped skunk (*Mephitis mephitis*), Audubon's cottontail (*Sylvilagus audubonii*), California ground squirrel (*Otospermophilus beecheyi*), gray fox (*Urocyon cinereoargenteus*), and, most notably, American badger (*Taxidea taxus*). The cameras along the road leading to the underpass also captured human and vehicle activity, which they found to statistically differ temporally from that of the wildlife. They also produced data on species accumulation over trap effort, temporal activity patterns of coyotes, and directionality of underpass use. Geographically, they found that animals traveling under the underpass were heading toward an area of proposed development, and that the corridor location suggested by project proponents may not be in the area where animals are traveling. The students and their advisors reported their findings at the 2011 MEDECOS conference at UCLA.

Working group member and UCLA Associate Adjunct Professor Travis Longcore coordinates the senior practicum, which has grown in four years from 17 to 77 students, and advised both projects. All senior practicum project reports, on topics ranging from green business to water quality to urban wildlife, can be found at: <http://www.environment.ucla.edu/academics/article.asp?parentid=2666>.

Chair - continued

Looking to the upcoming year, the UWWG has much to do. I anticipate we will have another strong presence at the next annual TWS conference. We have at least 2 symposium proposals submitted, and we hope to sponsor a field trip/workshop as well. Plans are underway for the next urban wildlife conference, to be held in Missouri. Charlie Nilon is heading that effort. We have a Facebook page, and I am soliciting help from all members in providing contributions to that effort, as well as materials for the newsletter. I also need to thank Rob Denkhaus for his excellent efforts on the newsletter.

We are in an age of urbanization, and this working group is more important than ever. We need to keep the ball rolling. Please let me know if you have any ideas or suggestions as we move forward. Till next time,

Stan Gehrt, Chair



THE WILDLIFE SOCIETY

Excellence in Wildlife Stewardship Through Science and Education

TWS Seeking Applicants for Leadership Institute

The Wildlife Society (TWS) is currently accepting applications for its Leadership Institute. The Institute's goal is to facilitate development of new leaders within TWS and the wildlife profession. The Institute will recruit 10-15 promising early-career professionals for a series of intensive activities and mentoring relationships. The focus will be on exposing the participants to the inner workings of TWS and increasing the number of active leaders in TWS and the wildlife profession.

From May until October, participants will engage in a series of activities to develop and expand their leadership skills. Institute members will also attend the TWS Annual Conference in Portland (October 12-17, 2012) and participate in various activities, including mentoring and leadership workshop sessions. The Institute is free, and participants also receive free registration and a travel grant for the conference.

Participation in the Institute is geared toward early-career professionals, individuals 2 to 3 years out of school (either undergraduate or graduate school), currently working full-time in a wildlife professional position, and with demonstrated evidence of their leadership potential. A small number of slots may also be available for (1) more recent graduates who have shown strong evidence of their leadership potential or (2) those who are working while concurrently pursuing a graduate degree. All applicants must be members of TWS and a Chapter or Section of TWS. The selection committee will be seeking to create a diverse group, with participants of varying gender, ethnic, and regional diversity. Selection will be based upon:

- An excellent academic record
- Demonstrated leadership capability or potential
- Demonstrated level of excellence in current position

Commitment to and involvement in TWS

Preference will be given to individuals who are certified as Associate Wildlife Biologists® or Certified Wildlife Biologists®, or who have submitted such an application to TWS.

Applicants must submit the following materials:

- Application form (available at <http://joomla.wildlife.org/leadershipinstitute/>)

- Cover letter with evidence of leadership capacity or potential, such as previous leadership positions held in TWS Chapters or Student Chapters or in other organizations
 - Résumé including a list of publications, awards, etc.
 - Academic transcript/s (scanned copy)
 - 2 letters of recommendation from supervisors, academic advisors, professors, or others in leadership positions with whom you have worked and who are familiar with your leadership potential, commitment to TWS, and commitment to wildlife management and conservation
- Letters should be e-mailed directly to: Christine Carmichael (ccarmichael@wildlife.org), subject line “Leadership Institute Recommendation for [applicant last name]”

• An essay (1000 word limit), which succinctly summarizes (1) your concept of leadership, (2) your aspiration for your role within TWS in 5 to 10 years, and (3) why you are an ideal candidate for the Institute

Application deadline is March 16, 2012. E-mail all materials (except the application form, which is submitted online) to: Christine Carmichael (ccarmichael@wildlife.org). Visit www.wildlife.org for more information (click on ‘Leadership Institute’ on the left).



TWS Annual Conference 2012

Portland, Oregon

October 13-17, 2012

Call for Papers @ joomla.wildlife.org/documents/portland/call.for.papers.pdf

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Urban Wildlife Working Group Mission Statement

The goals of this group are to facilitate communication and exchange of information among members of The Wildlife Society interested in urban wildlife management, to enhance knowledge and technical capabilities of wildlife professionals in the area of urban wildlife management, and to increase public awareness and appreciation of urban wildlife management issues and decision making processes.

Content Needed

We are always looking for content for this newsletter. We all work in an interesting field with lots of things worth telling others about. This is your chance to laud your successes and lament your failures to garner the kudos or sympathy of your peers. We all benefit from knowing what others are doing. Members are encouraged to submit research and management reports, current urban wildlife-related news stories and general items of interest to me at the email address listed below. Please include photographs when possible and include a caption with photo credit where applicable. Thanks!

Rob Denkhous
Newsletter Editor

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