# Urban Bird Conservation: For Birds and People

**5-12-2011**

REPORT OF WORKSHOP ICCB

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*COVER: BIRDS, PRIMARY SCHOOL 'STEIGEREILAND', AMSTERDAM*

# TABLE OF CONTENTS

**TABLE OF CONTENTS** ..... **2**

**WORKSHOP OVERVIEW** ..... **4**

BirdLife International Survey on Urban Bird Conservation ..... 4

**WORKSHOP PARTICIPANTS:** ..... **5**

**THEME 1 BIRDS AND PEOPLE** ..... **6**

Keynote: Rob Fergus - Birds and People ..... 6

Initial Survey Results - Birds and People ..... 6

Considerations - Birds and People ..... 8

Discussion Points - Birds and People ..... 8

**THEME 2 MONITORING & CITIZEN SCIENCE** ..... **10**

Keynote: Holly Parsons - Monitoring & Citizen Science ..... 10

Initial Survey Results - Monitoring & Citizen Science ..... 10

Considerations - Monitoring & Citizen Science ..... 11

Discussion Points - Monitoring & Citizen Science ..... 13

**THEME 3 PLANNING & DESIGN** ..... **14**

Keynote: Jenny de Laet - Planning & Design ..... 14

Initial Survey Results - Planning & Design ..... 15

Considerations - Planning & Design ..... 15

Discussion Points - Planning & Design ..... 16

**THEME 4 CORPORATE SUSTAINABILITY** ..... **18**

Keynote: Robbert Snep - Corporate Sustainability ..... 18

Corporate Building Checklist: Example from the Netherlands ..... 19

Considerations - Corporate Sustainability ..... 20

Discussion Points - Corporate Sustainability ..... 20

**APPENDIX I: CONSIDERATIONS FOR URBAN BIRD CONSERVATION** ..... **21**

**APPENDIX II: BIRDLIFE INTERNATIONAL GROUP ON URBAN BIRDS** ..... **22**

**Top 5 action list** ..... 22

# WORKSHOP OVERVIEW

Society for Conservation Biology, 25th International Congress for Conservation Biology, Auckland, New Zealand, 5 December 2011
**Organizers:** Robert Kwak and Jip Louwe Kooijmans, Vogelbescherming Nederland / *BirdLife Netherlands*

The *Urban Bird Conservation: For Birds and People* workshop was held at Auckland University in conjunction with the Society for Conservation Biology's International Congress for Conservation Biology. The workshop addressed the congress theme of "Engaging Society in Conservation" by focusing on:

i) BIRDS — the most visible and frequently experienced wild animals for most people, birds are also highly regarded by the general public worldwide, and

ii) CITIES — with human society becoming increasingly urbanized (>50% of world population in cities since 2007), conservation where people live and work is urgently needed to restore the link between humans and nature.

This workshop brought together top scholars in the field of urban ornithology, as well as experts in urban bird conservation and education. Workshop sessions focused on practical aspects of urban bird conservation and education, and explored the following themes:

- How to optimize the experience of urban birds by private citizens
- How to best monitor urban birds and habitats
- How urban bird conservation efforts can be integrated in sustainable city planning and design
- How corporations contribute to urban bird habitat creation, management, and conservation

Following keynote addresses on each of these themes, workshop participants formulated a list of considerations for each theme. Many additional comments and important avenues of exploration or concerns were expressed in the group discussions. This workshop report provides a short introduction to each theme, a summary of the keynote addresses, the lists of concerns generated for each theme, as well as additional notes from the group discussion.

The workshop was organized by Birdlife Netherlands in cooperation with Wageningen University Research Center. Since The Netherlands is one of the most highly urbanized countries in the world, BirdLife Netherlands serves as global pioneer on conservation of urban birds and chairs the new BirdLife International Group on Urban Birds (BIG UB).

## BirdLife International Survey on Urban Bird Conservation

During each workshop session, participants were presented with initial results of a survey of urban bird programs conducted by BirdLife International partners around the world. BirdLife International is a global partnership of conservation organizations that strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources. The BirdLife partnership includes 74 partners and 38 affiliate organizations in 112 countries. The survey on urban bird conservation was sent to all BirdLife partners in 2011, and consisted of questions about issues and local programs related to the conservation of birds in urban landscapes.

The survey received responses from 49 countries across all continents--including the Americas (9/19 partners), Europe (18/46 partners), Asia (6/17 partners), Middle East (2/11 partners), Pacific (4/8), and Africa (10/24 partners). Responses ranged from nations with large populations (United States--308 million, Nigeria--150 million) to the very small (Palau--20,796, Gibraltar--28,000) and from those with very dense human populations (including Singapore--7, 315 people/km² and Taiwan--638.5 people/km²) to more sparsely settled countries (such as Australia--2.7 people/km² and Canada--3.4 people/km²).
Full results will be presented in 2013 at the BirdLife International World Congress. Initial relevant survey results were presented at the beginning of each workshop session, and are summarized in this workshop report.

# WORKSHOP PARTICIPANTS:

- Gillian Ainsworth
- MonicaAwasthy
- Amber Bill
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- Kerry Charles
- J. Alan Clark
- Myfanwy Emeny
- Rob Fergus
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- Josie Galbraith
- Mel Galbraith
- Bonita Sample
- Robert Harrison
- Karen Ikin
- Weihong Ji
- Virat Jolli
- Laura Kearns
- Robert Kwak
- Jenny De Laet
- Benjamin Lee
- Jip Louwe Kooijmans
- Seth Magle
- John Marzluff
- Ann McGregor
- Tracey Moore
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- Holly Parsons
- Rodney van der Ree
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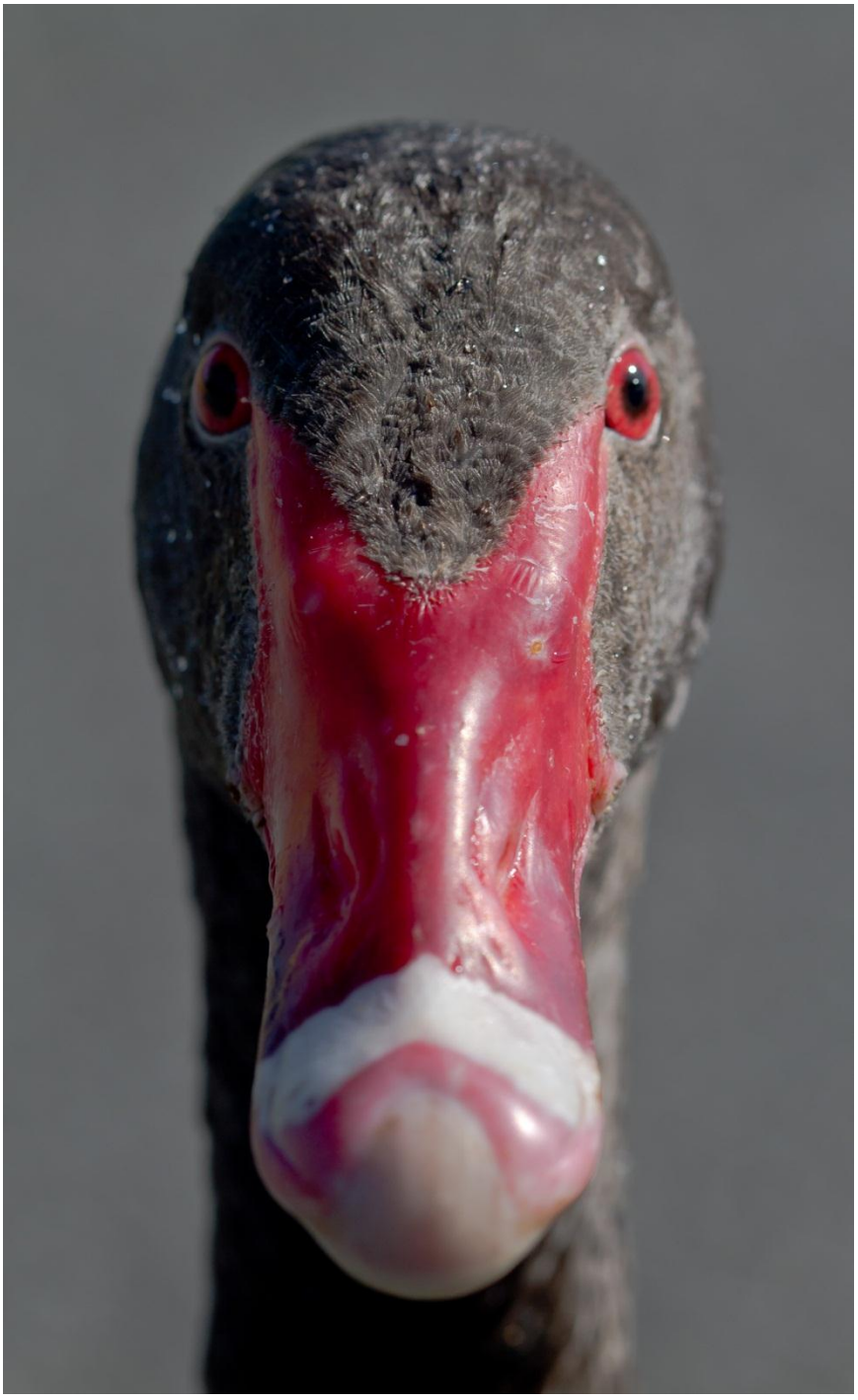
- Alice Ryan
- Henk Sierdsema
- Robbert Snep
- Rebecca Thomas
- Shannon Triplett
- Edward Waite
- Nicole Walters



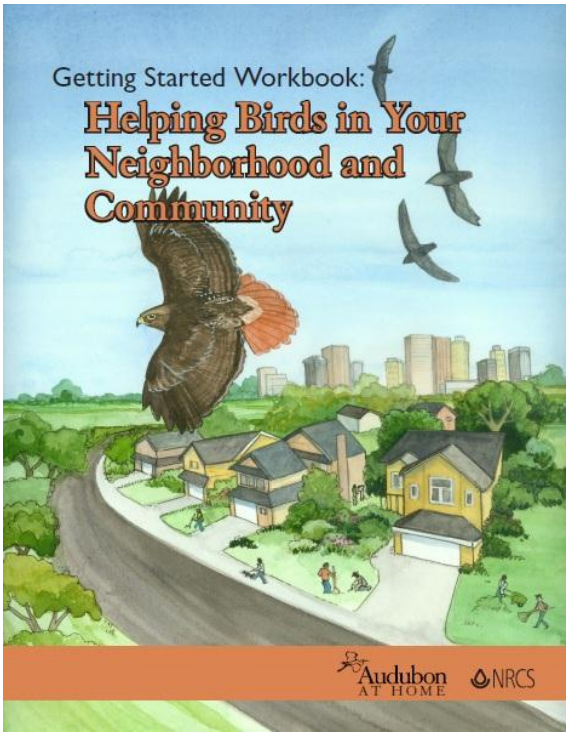
*Black swan* **Cygnus atratus,** *native in Australia, a popular introduction elsewhere in the world – photo: Daniel Burgas i Reira*

# THEME 1 BIRDS AND PEOPLE

## Keynote: Rob Fergus - Birds and People

*Birds and People: Urban Birds and Public Experience of Wildlife*
Rob Fergus, School of Graduate and Professional Studies, Rosemont College, Rosemont, PA, USA.

Successful urban bird conservation programs need to address the conservation needs of birds, habitat potential of various urban landscape forms, and the needs and motivations of urban residents. In North America, 100 of 178 Audubon Watchlist species, and 110 of 121 vulnerable common bird species are frequently found in urban areas. Whenever possible, urban bird conservation efforts should address birds of highest conservation concern within each landscape. In addition, the human/bird conflicts seldom addressed by conservation biologists are a significant aspect of how many people experience birds in urban areas. In North America, ten common pest birds--including Rock Pigeon (*Columba livia*), woodpeckers (Picidae), crows (*Corvus* sp.), Canada Goose (*Branta canadensis*), and House Sparrow(*Passer domesticus*)--cause most of these conflicts. Many Americans like birds: 46 million Americans regularly watch birds, either at home or away from home, 55.5 million feed wild birds and other wildlife in their backyards, and 13.1 million maintain plantings or natural areas for birds. People are most likely to participate in bird conservation projects that are inexpensive, easy, fun, and provide a sense of success for participants. While cities are often considered blighted and unfriendly to birds, urban and developed landscapes provide significant opportunities for habitat creation and management, including over 151,600 km² of residential yards and 2.2 million km² of residential exurban land in the conterminous U.S. states. For urban bird conservation programs to succeed, they should help birds of highest conservation concern in each urban landscape, maximize public participation (i.e. be inexpensive, easy, fun, and provide a sense of success for participants), as well as minimize hazards and maximize the habitat value of various urban forms. Audubon has a 100 year history of helping birds in cities, and in the 2000s, Audubon developed innovative programs including Audubon At Home and Birds to Help designed to meet these social and ecological criteria.




**Dr. Rob Fergus** explored Urban Bird Conservation efforts in the United States for his Ph.D. in the Department of Geography and Environment at the University of Texas at Austin, and is the former Senior Scientist for Urban Bird Conservation at Audubon. Dr. Fergus was also the founding director of the Hornsby Bend Bird Observatory and the first Executive Director of the Travis Audubon Society in Austin, Texas. He currently teaches courses in Urban Ecology and Sustainability at Rosemont College in Philadelphia, and consults on urban bird issues for the pest control industry.

## Initial Survey Results - Birds and People

Twelve BirdLife Partners reported that they conduct some form of garden or backyard bird count. Several other partners not responding to the survey are known to have similar counts, including Ireland, UK, France, Germany, and Finland. Since the public often responds favourably to iconic or charismatic species, the survey asked Partners if they have programs using iconic species as flagship species for conservation in urban areas. Partners reported programs involving iconic bird species in all regions and continents, including North America--Wood Thrush (*Hylocichla mustelina)*, Blue Jay (*Cyanocitta cristata*), Greater Roadrunner (*Geococcyx californianus*), and American Robin (*Turdus migratorius*); Europe--House

Sparrow (*Passer domesticus*), Lesser Kestrel (*Falco naumanni*), White Stork (*Ciconia ciconia*), House Martin (*Delichon urbicum*), Swallow (*Hirundo rustica*), Common Swift (*Apus apus*), and Barn Owl (*Tyto alba*); and the Pacific--Tui (*Prosthemadera novaeseelandiae*), Common Myna (*Acridotheres tristis*), Powerful Owl (*Ninox strenua*), and Superb Fairy-Wren (*Malurus cyaneus*).


*People feeding birds in a public park in Auckland New Zealand – photo: Rob Fergus*

## Considerations - Birds and People

1) Support for nature conservation starts in cities.
    - More than 50% of people live in cities worldwide.
    - Urban populations are increasing and people alienated from contact with the natural world need to reconnect with nature.
    - The first and most frequent contact with nature is usually in a garden, street or other urban setting, often in an organized setting.
    - Birds are easily seen and their coloration, behaviour, and diversity are interesting to many people.
2) People need education and conservation messaging in order to more greatly value bird conservation.
    - We need to make more use of modern communication platforms, such as online and mobile technologies, especially for young people.
    - People need to experience the outdoors in real life, not only through virtual media. People need opportunity's to connect with nature.
    - Nature and conservation are not the top priority for most people, but we can make it a higher priority. We need to address the trade-offs of decisions that people make.
3) Citizens can make a difference when it comes to habitat quality for birds.
    - Urban areas mostly consist of private property.
    - All gardens or yards together, including community gardens, green roofs, and balcony container gardens, make up a huge part of the urban landscape.
    - Urban conservationists need to increase and improve their lobbying of governments, businesses and other stakeholders.
    - Urban ecologists need to provide ecological education to citizens so that they improve their environmental stewardship, including guidelines for helping the birds that need the most assistance to survive in urbanizing landscapes.
    - Conservationists should explore linking with religious communities and teachings, such as traditions about sacred birds and habitats.
    - People need positive examples of preferred sustainable and ecological practices.

*Road sign in New Zealand*

## Discussion Points - Birds and People


- In the past, initial contact with nature was 'easier', as a high proportion of people resided in rural areas. Now contact with nature does not usually happen by chance, active engagement is necessary for first contact, and organization is usually needed to maintain frequent contacts with the natural world.
- Nature is good for health; from a government's perspective this is important. More lobbying for these health issues can increase public support for nature and bird conservation.
- Street trees and plantings are an important feature of city nature, can provide habitat for birds, and should be more highly valued.
- There is a need to collect, cherish and communicate bad and good practice guidelines, so that we can avoid extinction of ecological experience.
- For urban areas a main focus for bird conservation should be to maintain or restore high bird diversity, which will involve creating, restoring, protecting, and managing a wide diversity of habitats.

- Many people are disconnected from nature, and will need to be reconnected through various ways, including recreation and religion.
- It would be good to know why so many people love birds because these reasons can be used to attract more people to bird conservation.
- Conservation communication needs to be targeted, though we can use birds in many ways to promote a wide range of conservation messages.
- One challenge is how to engage with kids and teenagers. Effective solutions may involve social networking and new ITC technology (social media) such as eBird (eBird.org) or Celebrate Urban Birds! (http://www.birds.cornell.edu/celebration) and start within schools.
- What makes bird watching worthwhile for young people? We should point out the intrinsic value of birds but also how they benefit us as well. The best way to get them interested is through field experience. It is important to make bird watching fun and to raise the social value of bird study within youth culture.
- We need to be able to answer public questions of how to be better environmental stewards by showcasing best practices. This will empower people to demand better environmental practices, e.g. by lobbying companies.
- Since many people perceive a conflict between the value of jobs and the value of birds, we should usually avoid arguments about this. Birds are not as high a priority for most people, however people should be aware that there are trade-offs related to their actions. People should be encouraged to act in favour of bird and nature conservation.
- One example of connecting people to nature in cities is the creation of community gardens. This can even work in highly compressed cities by using small or non-traditional open spaces, including roof top gardens, as can be seen in many examples from Asia.

# THEME 2 MONITORING & CITIZEN SCIENCE

## Keynote: Holly Parsons - Monitoring & Citizen Science

*Citizen Science: Connecting Birds with People through Monitoring*
Holly Parsons, Program Manager, Birds in Backyards Program, BirdLife Australia

Birds in Backyards is a model citizen science bird monitoring program coordinated by BirdLife Australia. The program highlights how citizen science programs can play an important role in understanding birds, making change on the ground, and providing a positive outcome for public participants. In recent years, readily available tools such as the Internet and smart phones have made citizen science programs easier to conduct, providing researchers with low-cost assistance, and making possible large scale research with access to inaccessible locations, e.g. private properties. Three case studies from the Birds in Backyards program illustrate how backyard monitoring programs in urban areas can aid birds as well as provide benefits to participants:

1) The Powerful Owl Project--engaging citizens in locating all breeding pairs of owls, a charismatic and iconic species, in the Sydney Basin, to determine breeding success. More than 50 observers located 15 breeding territories and generated increased public concern over the survival of "their" owls.
2) Birds as Indicators--school-based program featuring teacher training, school excursions, in school support and links to curriculum, collected data on 29 species found at the schools.
3) Participant Survey--online survey of 500 Birds in Backyards members and 500 non-members, as well as focus groups with 20 members and 20 non-members, found that participants generally reported increased observation skills as well as an elevated sense of having contributed to protecting birds.

**Dr. Holly Parsons** is the Program Manager of Birds in Backyards and has been involved on and off since it began back in 1999. Her Honours research at the University of Wollongong was the first research module undertaken by Birds in Backyards and involved a large community survey of backyard birds in the Greater Sydney region. Dr. Parsons later completed her Ph.D. by studying the impact of urbanization on Superb Fairy-wrens. While she still loves conducting ecological research, Dr. Parsons has moved into the environmental education field by managing Birds in Backyards. She enjoys this rather unique position that allows her to remain involved in scientific research through various Birds in Backyards projects and the invaluable database of Birds in Backyard surveys, but she also gets to use birds as a way of communicating the importance of biodiversity to the broader community.

## Initial Survey Results - Monitoring & Citizen Science

Of the 49 BirdLife Partners responding to the global survey, 13 (26.5%) reported conducting some form of bird census in urban areas, including separate monitoring for breeding birds and wintering birds. Only seven of these partners indicated that they issue a report on the State of Urban Birds: Belgium, Kenya, Malawi, the Netherlands, Uganda, Singapore, and Taiwan. With this relatively low rate of monitoring, it is perhaps not surprising that information about the number of birds utilizing cities or other urban areas as prime habitat is limited--while Partners identified 204 such species, eight Partners indicated their responses were based on scientific surveys, while 23 based their response on educated guesswork. Of

the 204 species listed, several were reported from multiple continents or regions--including Barn Owl, House Sparrow, Rock Pigeon, Eurasian Collared-Dove (*Streptopelia decaocto*), and Laughing Dove (*Spilopelia senegalensis*).

## Considerations - Monitoring & Citizen Science

1) Bird monitoring is often the weakest in cities.
    - At least 70% of countries do not monitor the trend of urban birds.
    - In many cases where monitoring is undertaken the trend of bird species in urban areas is not known.
    - Urban monitoring programs are poorly funded, because their necessity is not well recognized.
    - Scientists often fail to recognize the importance of understanding urban bird dynamics.

    - There is a wide variety of monitoring schemes around the world, involving large numbers of people, but there is no uniformity. Simple surveys, like garden bird counts, can contribute valuable ecological data if well conducted.
    - There is more monitoring taking place than we know of, but these efforts are not coordinated (yet).
    - It is important that urban monitoring schemes are not too complicated or time-intensive. We need to tailor each program for different audiences.
    - It may be important to provide a different interface for different types of citizen scientists, for example different eBird 'clones' for different states and projects such as the Great Backyard Bird Count in North America.
    - Education is important for helping volunteers correctly identify birds. Visuals are important.
2) Little is known of population dynamics of urban birds.
    - Much remains to be discovered about urban habitats as population sources / sinks.

- We need a better understanding of bird reproduction, mortality, immigration and emigration, including predator dynamics.
- Many studies focus on habitat patches, but the ecological quality of the landscape matrix is also extremely important.
- It is important to be able to document and map population trends and fine scale distribution patterns.
- Monitoring does not lead to conservation, but it is an essential prerequisite for conservation and urban planning.
- Most current information and studies focus on popular or conspicuous birds.
- The influence of exotic birds on native species requires more study.
- If properly organized, social media may provide a valuable tool to gather data on bird behaviour and occurrence. One example might be nest monitoring through webcams.

3) Bird monitoring helps to connects birds and people
   - Indicator species can help us assess impacts on ecosystems. We can use the ecology and life history of these species to tell stories about the birds and their environment.
   - Nuisance or pest species can be used to our advantage as well. They often serve as environmental indicators of unattractive landscapes that we can improve (such as with garbage removal). We must recognize that we have created the habitat for these birds, and if we don't want them at nuisance levels, we can alter the habitats that sustain them.
   - We should study how urban adapters survive or even thrive in these environments. What factors allow them to survive in cities, and can we use that knowledge to alter habitats so that species of greater conservation concern can also thrive there?
   - Declaring a 'Bird of the Year' with related activities throughout the year may be one way to generate additional support for bird conservation.
   - Raising enthusiasm for charismatic or iconic species can generate additional opportunities for conservation funding.
   - Webcams provide opportunities for connecting people with nature and gathering data, but people may also witness less pleasant incidents, such as predation. This can provide an additional opportunity to educate the public about ecological principles.

*TUI* **PROSTHEMADERA NOVAESEELANDIAE** *A POPULAR NATIVE GARDEN BIRD IN NEW ZEALAND – PHOTO: HENK SIERDSEMA*

## Discussion Points - Monitoring & Citizen Science

- We need to survey habitats, as well as species presence and absence.
- In addition to providing a baseline of local bird populations, and the ability to track bird populations through time, monitoring of urban bird, especially through citizen science, connects people to birds.
- To attract attention (and funding) for research on urban birds, it may be preferable to focus on an iconic or charismatic bird species or on research that highlights individual birds, for instance through color banding studies that allow people to view birds as individuals or even as 'our bird'. This gives citizens a feeling of ownership, which can lead to a greater sense of environmental responsibility for 'their' birds.
- There are variations between countries as to how well urban birds are studied. In most countries, studies of urban birds are underrepresented, though the opposite seems to be the case in Australia.
- There are opportunities to involve the public in studies, for example Dr. de Laet's nestbox studies of Great Tits (*Parus major*) in Belgian (Ghent) cities.
- We need a variety of research options, involving several levels of required skills for various groups of potential volunteers.
- Surveys should not only focus on endangered species, but on common species as well. They should track bird responses to habitat alteration, as well as the status of bird populations through time.
- Ecologists should search for metrics that can provide an early indicator of populations under stress in order to detect detrimental changes before populations have become irreversibly effected.
- Surveys should examine how distribution and use of local habitats changes through the seasons.
- Presence and absence of data from surveys may seem unimportant, but even negative data--a documented lack of bird presence--means a lot.
- Do not forget pest species, i.e. the pigeon paradox-pest species can draw a lot of public attention, can serve as environmental indicators, and may be of economic interest to the community.
- Urban Bird Ecology seems to provide excellent opportunities for education to 'celebrate urban birds' and create a diverse array of communication strategies, especially online (weblogs, photos, guest books, etc.).
- It has been difficult in the past to get funding for ecological research in urban areas. However, urban areas provide excellent study opportunities, for instance to look at sink-source relationships.

Urban bird data are still underused. As an example, local bird distribution maps could be used to evaluate proposed development plans.

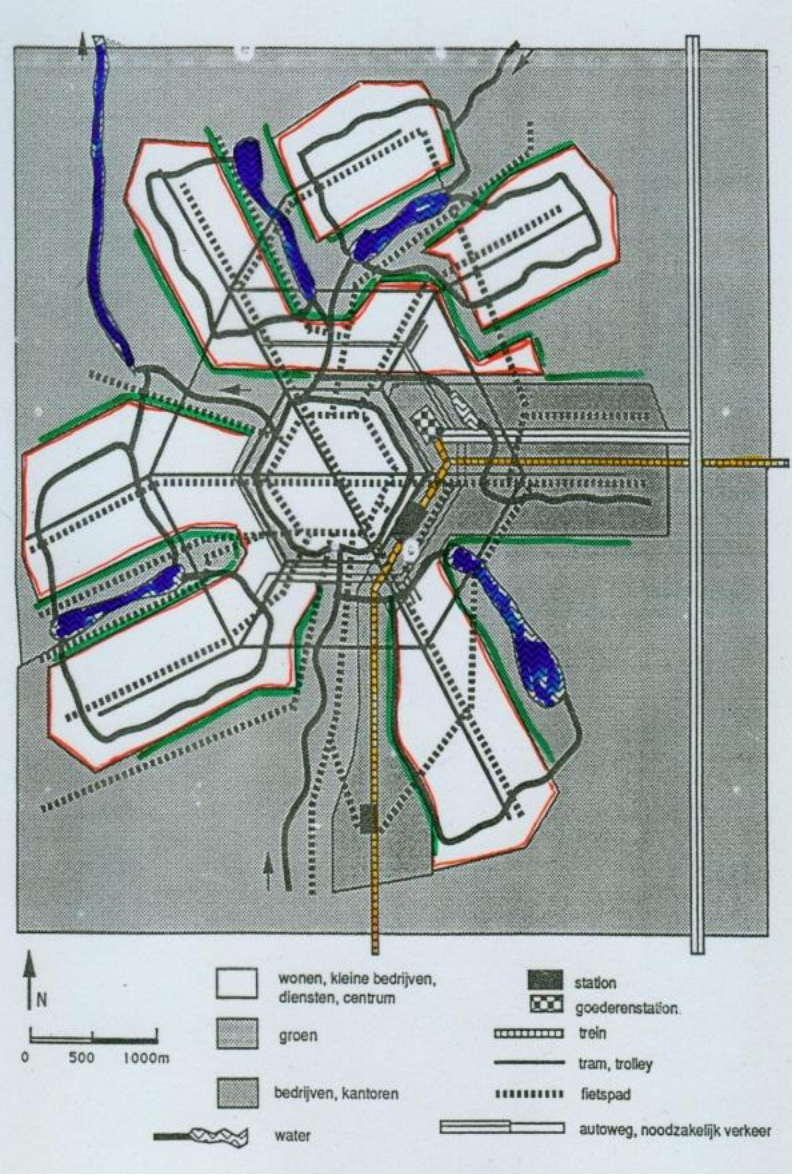
# THEME 3 PLANNING & DESIGN

## Keynote: Jenny de Laet - Planning & Design

*Urban birds: Conservation and sustainable city development: the House Sparrow and the Great Tit as urban bio-indicators*

Jenny de Laet, Terrestrial Ecology Unit, University of Ghent, B-Ghent, Belgium

Urban House Sparrows occupy smaller home ranges than conspecifics from rural areas, and this pattern is most distinct where key cover is highly scattered. In urban plots, patch connectivity, home range sizes and activity areas are positively correlated. Urban House Sparrows show the smallest feather growth bars which is positively related to home range size. Individuals from progressively more built-up areas show a restricted ability to adjust their daily ranging behaviour to the scattered distribution of critical resources. In the Flemish part of Belgium, House Sparrow groups are small (< 10 individuals), and group sizes are still declining. Urban areas also seem to form a 'sink' for urban Great Tits. The lobe-city model is a solution for urban biodiversity in general. Cities are generally regarded as the cause of many ecological and social problems. The lob-city model was developed in the first half of the 20th century. Lobe-cities offer blue-green wedges (or 'fingers') between the built up lobes. Those blue-green fingers should be connected with the ecological infrastructure in the rural area. The blue-green fingers attract biodiversity next to the city center. The Lobe-city may be the ideal form for an ecocity, as outlined by Erik Rombaut in 2007 (http://www.curbain.be/download/Architectureurbanplanningandbiodiversity2MED.pdf)



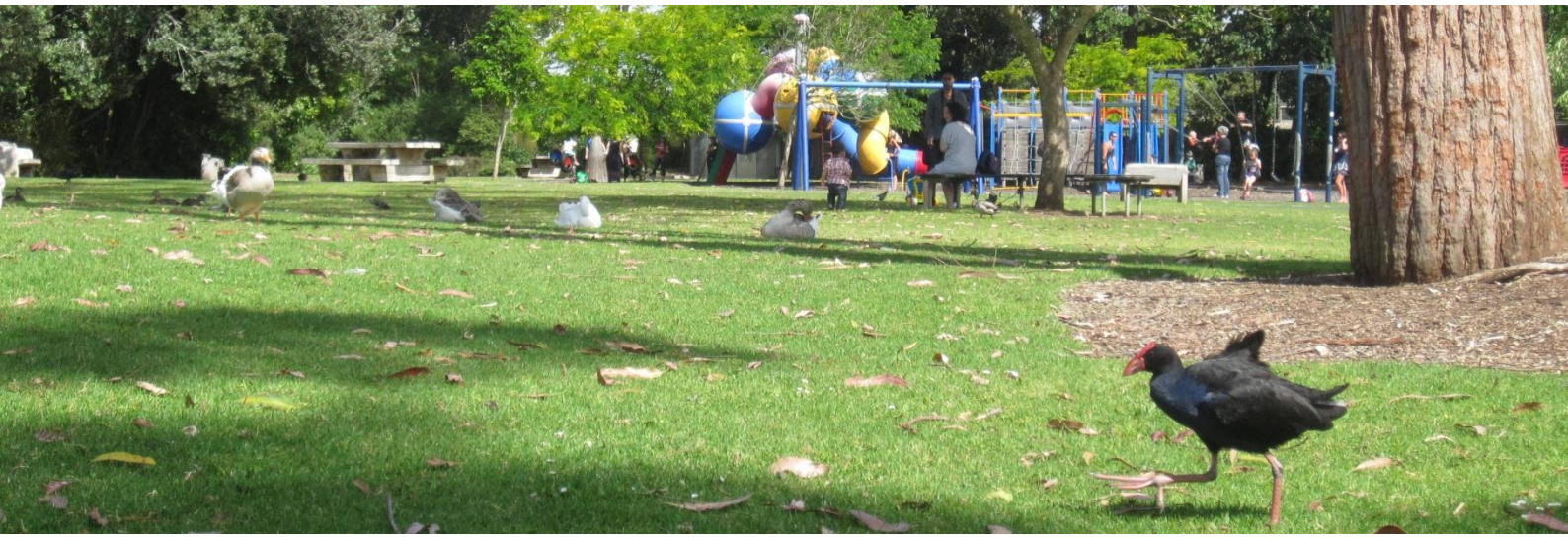

**Dr. Jenny de Laet** is a behavioural ecologist working, part time as a policy manager for a nature and conservancy association (A.B.L.L.O.vzw) in the Flemish part of Belgium, especially on sustainable urban development. She is also a visiting researcher at the Group Terrestrial ecology of Ghent University working on urban House Sparrows and Great Tits as urban bio indicators, including research involving citizen science. Since 1995 she has published a number of popularizing scientific books on the behaviour of birds around people; for which she received in 2008 the first 'NoBelgische' Prize on science popularization.

## Initial Survey Results - Planning & Design

The 2011 Survey asked BirdLife partners about their urban habitat planning activities. 22 Partners reported supporting bird friendly gardening activities, such as the Audubon At Home program in the United States, and Birds in Backyards in Australia. 17 Partners reported that they provide advice on city planning. Congregations of nuisance bird may sometimes cause problems in urban areas, and Partners reported a range of species that may become urban pests, including several doves, starlings, mynas, corvids, gulls, weavers, sparrows, and parakeets. Since planning efforts need to address birds of highest conservation concern, partners were asked about Red List species in urban areas. Worldwide, 40 species were listed as locally Red Listed by BirdLife Partners. These include characteristic species like the Chimney Swift (*Chaetura pelagica*) and Lesser Kestrel. In a few countries even the House Sparrow is red listed.

## Considerations - Planning & Design

1) Habitat quality should always be a serious issue in city planning.
    - Cities are not merely disturbed natural habitats, but unique habitats of their own, with characteristic species.
    - Cities grow and change constantly, but habitat for urban birds does not necessarily grow or improve.
    - On every construction site natural habitat is lost but at the same time habitat is built for other species.
    - Since urban areas are often dominated by exotic introduced species that thrive in built landscapes, plans for urban bird conservation should aim to create or maintain habitats that can support significant populations of native birds that can thrive in urban landscapes and not foster the spread of nonnative species into unbuilt areas.
    - Spacing and connectivity of vegetation and other habitat features are also a part of habitat quality.
    - Efforts should be made to prevent bird collisions with glass windows or panes along roads and prevent light pollution.
    - Make better use of existing green elements such as water and trees. Mitigation can be avoided by preserving and using available greenspaces.
    - Special sites could be protected through city planning, for instance by designing them as IBA's.
    - It is important to develop partnerships between city planners, business and scientists/conservation.



*In New Zealand Pūkeko is the common name for the Purple Swamphen* **Porphyrio porphyrio**. *The name is derived from the Māori language. – photo: Rob Fergus*

- The phenology of species should be taken into account (e.g. breeding vs. nonbreeding use of habitats).
- Create or use temporary habitats on developing land, such as bare patches that can attract field or shore birds.
- Urban areas can sometimes provide a safe haven during harsh conditions such as cold winters or droughts.

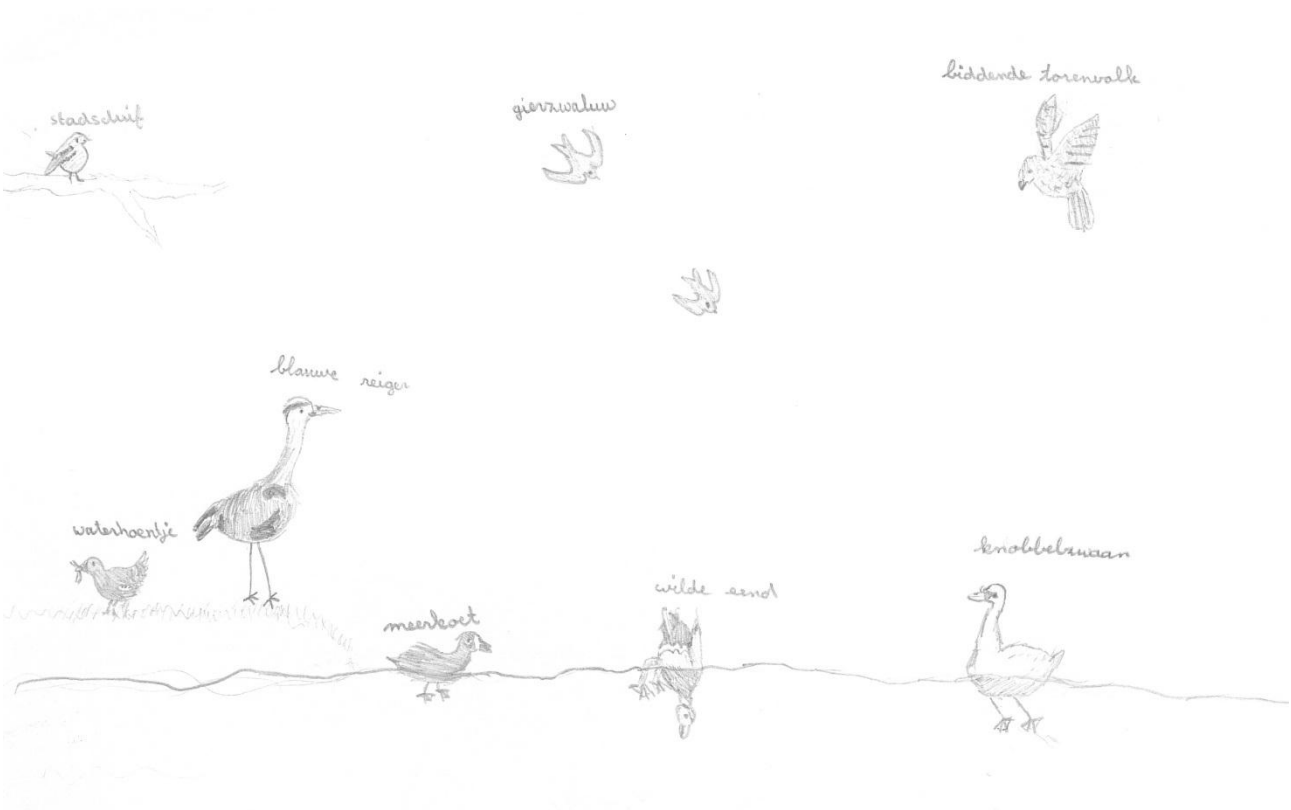
2) Since urban landscapes represent a mosaic of habitats providing diverse opportunities for birds, planning efforts should seek to create and maintain an appropriate balance of habitats that provide the most opportunities for the most species.
   - Support multi-functional land use, such as green spaces (eg. green roofs).
   - We need to plan cities to use less space, but sustain more bird habitat.
   - Green is not paint or plastic--replace non-living ornamentation with vegetation that can provide habitat.
   - We need to determine what birds and habitats we want in the future and plan for them, and determine which unbuilt areas should never be built upon because doing so would cause irreversible damage to birds. Current city planning decisions will determine future habitats available in urban areas.
   - Monitor the positive and negative consequences of our city building and urban conservation efforts.
3) Both people and birds benefit from green cities.
   - Urban green is habitat for birds.
   - People are healthier in green cities.
   - We have to be more proactive in creating green habitats because they are good for birds AND people.
   - Bring nature closer within urban areas by improving habitat connectivity.


*Information sign in New Zealand*

## Discussion Points - Planning & Design

- Cities should be diverse for species with different needs, complexity is an important issue. Encourage studying and managing the city as a whole, as a collection of connected habitats that function together as a united urban ecosystem.
- Ornamental plants, while sometimes invasive and destructive, should be recognized as sometimes providing important habitat features for birds.
- There is still a large knowledge gap concerning the value that invasive plant species have for birds.
- Since each species has its own ecological niche and needs, planning for urban birds needs to address the needs of all species, as well as the habitat potential of all urban landscapes.
- Teach ecology and provide ecological education to city planners and architects in ecology, both as workshops for professionals, as well as part of degree programs in colleges and universities.
- Take a proactive, rather than defensive approach in designing and planning cities. Seek to design a bird friendly city instead of reacting to unwelcome developments. Advocate thoughtful development.
- Seek to incorporate important urban habitats and sites, such as IBAs, into community and regional planning efforts.
- Use arguments about other human values, such as the need for recreational opportunities, in order to advocate for habitat preservation, connectivity, and the creation of habitat corridors.

- In some cases urban bird populations are stable and could buffer or provide a source for rural populations.
- Habitat planning needs to take into account the inevitability of rare and random events, nonlinear dynamics, and chaotic systems. Create buffers by maintaining populations and habitats at above replacement levels so that they can survive any and all possible events. Use adaptive management techniques so that different management approaches can be compared and altered to meet changing circumstances--including ecological, political, and economic conditions.
- Monitoring of stress markers may allow conservation managers to detect detrimental changes before populations have become irreversibly affected. Such an early warning system may then allow them to assess whether or not remedial actions are urgent or not.




*URBAN BIRDS BY ROSIE FROM PRIMARY SCHOOL 8E MONTESSORISCHOOL, AMSTERDAM*

# THEME 4 CORPORATE SUSTAINABILITY

## Keynote: Robbert Snep - Corporate Sustainability

*Urban Bird Conservation--A Role for Corporations?*
Dr. Robbert Snep, Green City Research, Research Institute Alterra, Wageningen Univesity & Research Center, the Netherlands

Traditional corporate building sites feature land use dominated by buildings and paved areas, with usually sparse and ornamental vegetation of little ecological value. These buildings provide few nesting or other opportunities for birds, as well as few opportunities for people to experience birds and other wildlife. While these areas traditionally have held little conservation value, they have a high conservation potential since they are abundant and often feature large landscapes that can be designed and managed for wildlife. Since workers at these sites spend a large portion of their daily time on site, corporate wildlife habitats can play a valuable role in influencing public perceptions, expectations, and experiences of wildlife and their habitat. Corporate habitat sites can improve the quality of life in urban neighbourhoods and the quality of life of workers. They can also impact biodiversity conservation in urban and nearby rural areas. One study showed that 1/6 of 600 business sites in the Netherlands are located adjacent to Ecological Main Structure lands. Measures for enhancing the biodiversity conservation of business sites include the creation of green roofs, ecological management of corporate greenspaces, management of temporary habitats, and new habitat creation. Examples of corporate habitat projects include DuPont's Land Legacy Program, the BTO Business Bird Challenge, the Sony EMCS Corporation Tokai TEC Kohda Site, the Crewe Business Park, and the work of Wildlife Habitat Council Corporate Members in the United States.


*REAL ESTATE ADVERTISEMENT WITH GARDEN BIRDS [ROBIN, TUI, & BELLBIRD] AS UNIQUE SELLING POINTS*

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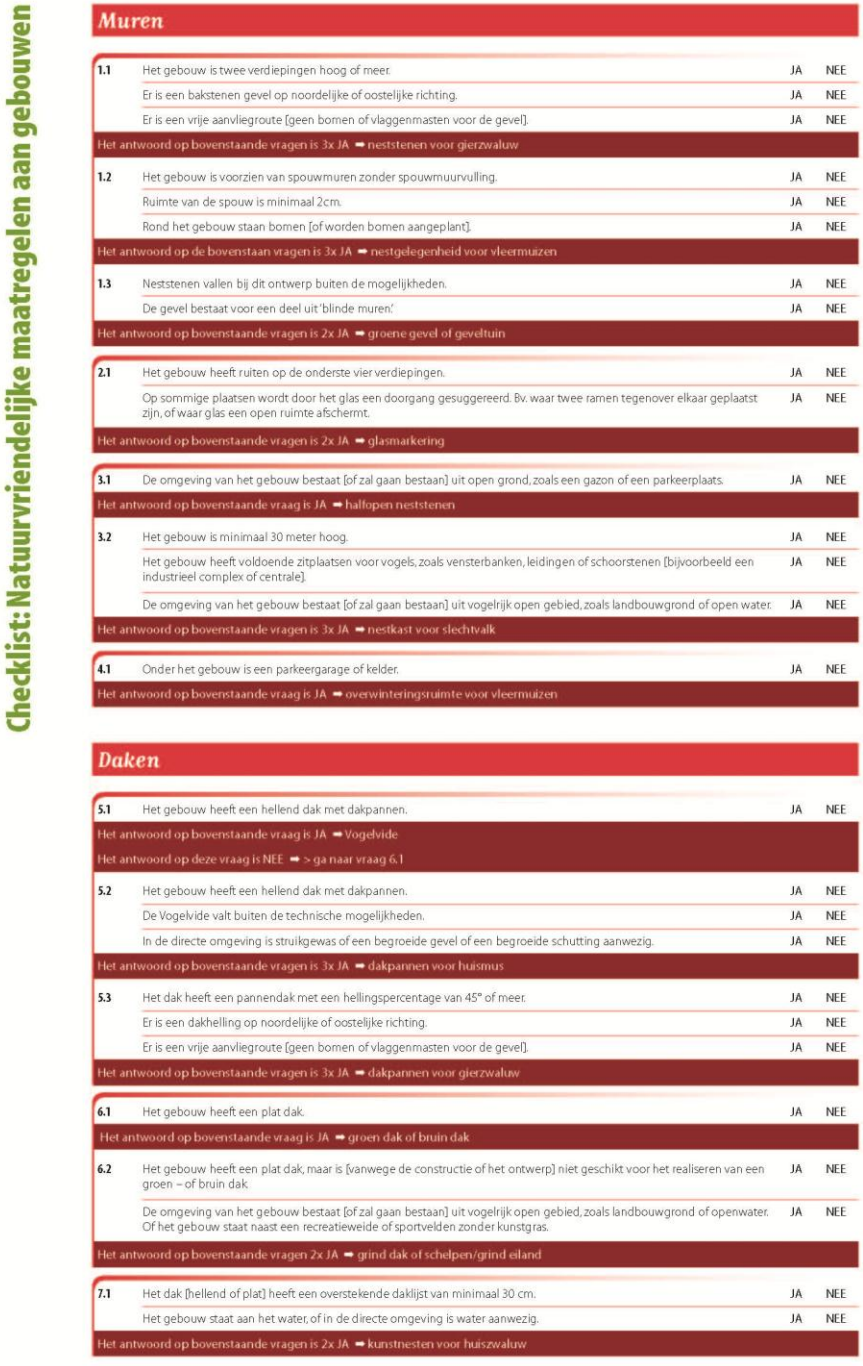
## Corporate Building Checklist: Example from the Netherlands

The BirdLife survey on urban birds did not ask about work on corporate lands, though some partners such as BirdLife Netherlands are pioneering work with building contractors. As presented at the workshop, BirdLife Netherlands, in partnership with BAM –the biggest construction company in the country--has developed a nature-friendly building checklist to promote and measure the wildlife value of buildings and new construction. The checklist covers the three main components of the built landscape--buildings, water, and greenspace. Builders and others can use the checklist to analyze the nature and bird-friendly measures that are applicable to their construction or renovation projects, and can find additional suggestions on elements that they can incorporate into their building and property--such as built-in nest boxes and planting suggestions.



Checklist: Natuurvriendelijke maatregelen aan gebouwen

**Muren**

| | | | |
|---|---|---|---|
| 1.1 | Het gebouw is twee verdiepingen hoog of meer. | JA | NEE |
| | Er is een bakstenen gevel op noordelijke of oostelijke richting. | JA | NEE |
| | Er is een vrije aanvliegroute (geen bomen of vlaggenmasten voor de gevel). | JA | NEE |
| | Het antwoord op bovenstaande vragen is 3x JA ➡ neststenen voor gierzwaluw | | |
| 1.2 | Het gebouw is voorzien van spouwmuren zonder spouwmuurvulling. | JA | NEE |
| | Ruimte van de spouw is minimaal 2cm. | JA | NEE |
| | Rond het gebouw staan bomen (of worden bomen aangeplant). | JA | NEE |
| | Het antwoord op de bovenstaan vragen is 3x JA ➡ nestgelegenheid voor vleermuizen | | |
| 1.3 | Neststenen vallen bij dit ontwerp buiten de mogelijkheden. | JA | NEE |
| | De gevel bestaat voor een deel uit 'blinde muren.' | JA | NEE |
| | Het antwoord op bovenstaande vragen is 2x JA ➡ groene gevel of geveltuin | | |
| 2.1 | Het gebouw heeft ruiten op de onderste vier verdiepingen. | JA | NEE |
| | Op sommige plaatsen wordt door het glas een doorgang gesuggereerd. Bv. waar twee ramen tegenover elkaar geplaatst zijn, of waar glas een open ruimte afschermt. | JA | NEE |
| | Het antwoord op bovenstaande vragen is 2x JA ➡ glasmarkering | | |
| 3.1 | De omgeving van het gebouw bestaat (of zal gaan bestaan) uit open grond, zoals een gazon of een parkeerplaats. | JA | NEE |
| | Het antwoord op bovenstaande vraag is JA ➡ halfopen neststenen | | |
| 3.2 | Het gebouw is minimaal 30 meter hoog. | JA | NEE |
| | Het gebouw heeft voldoende zitplaatsen voor vogels, zoals vensterbanken, leidingen of schoorstenen (bijvoorbeeld een industrieel complex of centrale). | JA | NEE |
| | De omgeving van het gebouw bestaat (of zal gaan bestaan) uit vogelrijk open gebied, zoals landbouwgrond of open water. | JA | NEE |
| | Het antwoord op bovenstaande vragen is 3x JA ➡ nestkast voor slechtvalk | | |
| 4.1 | Onder het gebouw is een parkeergarage of kelder. | JA | NEE |
| | Het antwoord op bovenstaande vraag is JA ➡ overwinteringsruimte voor vleermuizen | | |

**Daken**

| | | | |
|---|---|---|---|
| 5.1 | Het gebouw heeft een hellend dak met dakpannen. | JA | NEE |
| | Het antwoord op bovenstaande vraag is JA ➡ Vogelvide | | |
| | Het antwoord op deze vraag is NEE ➡ > ga naar vraag 6.1 | | |
| 5.2 | Het gebouw heeft een hellend dak met dakpannen. | JA | NEE |
| | De Vogelvide valt buiten de technische mogelijkheden. | JA | NEE |
| | In de directe omgeving is struikgewas of een begroeide gevel of een begroeide schutting aanwezig. | JA | NEE |
| | Het antwoord op bovenstaande vragen is 3x JA ➡ dakpannen voor huismus | | |
| 5.3 | Het dak heeft een pannendak met een hellingspercentage van 45° of meer. | JA | NEE |
| | Er is een dakhelling op noordelijke of oostelijke richting. | JA | NEE |
| | Er is een vrije aanvliegroute (geen bomen of vlaggenmasten voor de gevel). | JA | NEE |
| | Het antwoord op bovenstaande vragen is 3x JA ➡ dakpannen voor gierzwaluw | | |
| 6.1 | Het gebouw heeft een plat dak. | JA | NEE |
| | Het antwoord op bovenstaande vraag is JA ➡ groen dak of bruin dak | | |
| 6.2 | Het gebouw heeft een plat dak, maar is (vanwege de constructie of het ontwerp) niet geschikt voor het realiseren van een groen – of bruin dak. | JA | NEE |
| | De omgeving van het gebouw bestaat (of zal gaan bestaan) uit vogelrijk open gebied, zoals landbouwgrond of openwater. Of het gebouw staat naast een recreatieweide of sportvelden zonder kunstgras. | JA | NEE |
| | Het antwoord op bovenstaande vragen 2x JA ➡ grind dak of schelpen/grind eiland | | |
| 7.1 | Het dak (hellend of plat) heeft een overstekende daklijst van minimaal 30 cm. | JA | NEE |
| | Het gebouw staat aan het water, of in de directe omgeving is water aanwezig. | JA | NEE |
| | Het antwoord op bovenstaande vragen is 2x JA ➡ kunstnesten voor huiszwaluw | | |

## Considerations - Corporate Sustainability

1) Corporations should produce sustainable results and bird and nature conservation should be a part of corporate environmental responsibility.
    - Corporate ecological projects provide a positive contribution to the world.
    - Habitat and ecological stewardship projects are good for corporate image.
    - Corporate projects can provide habitat conservation, as well as ecological restoration.
    - Corporations are increasingly creating plans and new business models to become more sustainable. Thinking and acting green may be good for long term business, while habitat projects can increases property value.
    - Ecological stewardship of corporate sites for the long term preserves their value, and eliminates the need to create new facilities all the time and abandon old ones.
    - We have to go BIG: companies have a global audience.
    - Companies can brand themselves with a particular species or endangered habitat.
    - Conservationists can partner with activists and the general public to shame businesses that are persistently environmentally unfriendly.
2) Companies should enable and inspire their employees and visitors to participate in conservation efforts within the company, and thereby contribute to creating and maintaining a better world.
    - Many employees like to participate in conservation and nature activities which will also improve workplace health and work efficiency.
    - The public can be invited to visit corporate sites to watch birds in corporate properties.
    - Corporations can encourage bird watchers to visit their site and to count the birds
3) Nature conservation can help companies to define their corporate role in nature conservation
    - We need to find common interests between conservationists and corporate owners and leaders.
    - Conservation activities and habitat projects can attract customers and potential corporate partners.
    - Leaders can use lunch time talks to spread the word and encourage employees to engage in nature management at their site.
    - Conservationists need to work together with landscape architects. We can make it easier for them to incorporate best practices by creating checklists and providing good ecological information for them.
    - Conservation professionals need to take their role seriously and instill corporate leaders with the confidence that their ecological plans and ideas will work.

## Discussion Points - Corporate Sustainability

- Urban conservationists can promote programs such as the Wildlife Habitat Council programs that assess and certify companies that do well in bird conservation on their land.
- Involve landscape architects and set up educational workshops, university curricula, and certification systems for them.
- Nature conservation organizations need to behave and act in a professional way in order to gain trust with companies.
- Corporations have an almost limitless opportunity to restore habitat on their corporate lands.
- We need to be able to show how ecological restoration and habitat stewardship provides advantages to corporations within their business environment.
- It is important to be able to document and show the economic value of green practices, such as habitat creation and protection.
- We can promote habitat stewardship and conservation to corporations as a valuable component of their corporate branding. One example is the collaboration between Dow and The Nature Conservancy (see Dow's *Valuing Ecosystems 2011 Global Conservation Report* (http://www.dow.com/sustainability/pdf/2011-Conservation-Report-COMBINED.pdf)

# APPENDIX I: CONSIDERATIONS FOR URBAN BIRD CONSERVATION

1) Support for nature conservation starts in cities.
2) People need education and conservation messaging in order to more greatly value bird conservation.
3) Citizens can make a difference when it comes to habitat quality for birds.
4) Bird monitoring is often the weakest in cities.
5) Little is known of population dynamics of urban birds.
6) Bird monitoring helps to connects birds and people.
7) Habitat quality should always be a serious issue in city planning.
8) Since urban landscapes represent a mosaic of habitats providing diverse opportunities for birds, planning efforts should seek to create and maintain an appropriate balance of habitats that provide the most opportunities for the most species.
9) Both people and birds benefit from green cities.
10) Corporations should produce sustainable results and bird and nature conservation should be a part of corporate environmental responsibility.
11) Companies should enable and inspire their employees and visitors to participate in conservation efforts within the company, and thereby contribute to creating and maintaining a better world.
12) Nature conservation can help companies to define their corporate role in nature conservation

# APPENDIX II: BIRDLIFE INTERNATIONAL GROUP ON URBAN BIRDS

The Netherlands is one of the most urban nations on earth, and Vogelbescherming Nederland / Birdlife Netherlands early recognized that urban settlements are important habitats for both birds and people, and that cities are where most people are likely to be recruited in support of bird preservation. Since several other BirdLife partners were also working on urban bird issues and involving the public in bird protection in their urban daily living space, Vogelbescherming Nederland initiated efforts to bring these partners together as a working group on Urban Birds within BirdLife International. The BirdLife Group on Urban Birds (BIG UB) works to increase BirdLife's expertise, influence on policies, public profile and fundraising opportunities in the field of the urban environment as a habitat for birds and people, by focusing on synergy between partners by exchange of knowledge, experience and practical tools for conservation as well as communication. Group organizing began with informal discussions at Urbio 2008 (Erfurt 2008) and the BirdLife World Conference in Argentina (Buenos Aires 2008), and the group formally convened for the first time a year later in Leiden, The Netherlands (6-7 November 2009).

## Top 5 action list

BIG UB members identified the following Top 5 action list for the group:

1) Compile a list of current activities and best practices for publication in an official BirdLife paper on urban bird conservation.

2) Utilize the BirdLife paper to create a framework for BirdLife urban bird conservation recommendations for rollout and discussion at a BirdLife Global Meeting.

3) Identify gaps in knowledge and education needed for conservation or birds in urban areas

4) Create a list of Important Bird Areas & threatened birds in urban areas

5) Convene an international conference on urban bird conservation to include a second BIG UB meeting

A BIG UB steering committee formed to further these actions and the work of the group.

*CHILDREN WATCHING A NEW ZEALAND ROBIN* **PETROICA AUSTRALIS**. – *PHOTO: DANIEL BURGAS I REIRA*