

# **Avian Mortality at Communications Towers**

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## **Presentation Number 7**

### **Buildings, lights, findings applicable to towers, cumulative effects — the Canadian perspective**

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#### **Al Manville's introduction of the seventh speaker, Michael Mesure.**

Our next speaker gives us an international perspective on the issue of lighting. From early childhood Michael had artistic talent which led one to conclude that a career as an artist was inevitable. There, however, was an underlying sign that this might not be the case mainly because of the subject matter he chose to draw: birds. As he grew up, his fascination with birds would reveal itself time and time again. In 1989, a close friend of Michael's mentioned that he had once read something about birds flying into windows at night. Michael, both fascinated and horrified by this statement, had to check it out and indeed discovered bird mortality in Toronto. In 1993 he formed the Fatal Light Awareness Program, also known as FLAP. In 1996 FLAP and the World Wildlife Fund of Canada came together and produced the document entitled *Collision Course: The Hazards of Lighted Structures and Windows to Migrating Birds*, and they've also come together to develop the Bird-Friendly Building Program. Our speaker this afternoon is the Founder and Executive Director of FLAP, Michael Mesure. He's going to be talking about buildings, lights, and findings applicable to towers, cumulative impacts, and the Canadian perspective. Michael.

#### **Michael Mesure**

What I thought I would do is share with you FLAP's experience in dealing with the corporate circle because you are very much going to have to deal with this with the communications companies. I think it's very important to remind yourself that, in spite of the fact that birds are colliding with these structures – communications towers, lighted high rises and so forth – that this was not the original intent of these structures to harm birds. It is really difficult, when you are finding bird mortality happening at individual structures across this entire continent, to calm yourself down when communicating with these people.

Just a little bit about FLAP. We are a volunteer-based organization. We have no real ornithological background other than our basic experiences in birding and self-research. So we are limited in our ability to conduct a controlled study. We are conducting a controlled study to a degree in that we collect birds around high rises around Toronto's financial district in the spring and fall on a yearly basis. So, eventually we want to get more people with a scientific background involved that can help us compile more accurate figures with the data we are collecting.

This is all too familiar a sight, you are looking at some 70 species of birds here. FLAP will encounter some 70 different species each year. FLAP first started in 1993. Our original activities were focused specifically on the lighted structures within major cities. We very quickly evolved into focusing on collisions with human-built structures. This is just a bit of statistical background. We encounter close to 2,000 dead birds each year within the financial district. That represents a very small percentage of the birds that are actually colliding within the financial district. We have to take into consideration that there are ledges that the birds fall onto that we can't access, there's a tremendous amount of scavenging going on, and in some cases they are swept up by cleaning staff. We are only able to focus on less than a third of the actual core. So, when we compile all these variables, we can estimate that some 10,000 birds collide with the high-rises within Toronto alone.

Not to get it confused with daytime collisions, but inevitably this is part of what we are focusing on as well. This is interesting. When you are dealing with the corporate world, you are going to find that they are more than willing to help – the bottom line is the dollar figure. They don't want to spend hundreds of thousands of dollars in making the necessary changes, and this is where research needs to be done – ways that we can work with existing structures without spending a tremendous amount of money to make a difference.

We also offer the opportunity for a good corporate-citizen reputation. This image was in a double full-page article in the *Toronto Sun*, which is one of Toronto's largest newspapers. The day that the article came out I got a phone call from the Royal Bank of Canada and they said right off the top, "What do we do to stop birds from flying into our structure?" To tell you the truth, all we could say at that time was turn off your lights. We very quickly realized, here's an opportunity to work with a large corporation, to rack their brains on what they feel they can and can not do, and from that create a program, which hence became the Bird-Friendly Building program. But then when we sat in the meeting with them, it came out in the open why they called. It was this right here [slide shown], that's their logo – totally accidental. But they saw their logo associated with death and they didn't want to see that, and they wanted to do anything they could to make a change.

This is the Collisions Course report [slide shown] – *The Hazards of Lighted Structures and Windows to Migrating Birds*. I have a few copies of them up there if anyone is interested, and this is the Bird-Friendly Building Program. Now the Bird-Friendly Building Program a one pager which consists of 12 recommendations that we offer to buildings on how they can reduce lighting, or what we call – "control the escape of light" – from their structures without spending hundreds of thousands of dollars. We were going to call it the 12-step program but then that conjured up Alcohol Anonymous and we thought better not to do that. The bottom line is simple. At the flick of a switch they can save birds lives, but the tricky part is changing the habits of the people within these structures. Now obviously communications towers are to a degree a totally different situation – not dealing with tenants in the structures and so forth, but you are dealing with a corporate image, and it is so important that they get that positive reinforcement all the time.

This is the Bird-Friendly Building certificate [slide shown]. Any building that adopts the Bird-Friendly Building Program receives this certificate to hang on their wall. It's difficult to see, but there are 5 gold seals, and each year the participants are rated on their progress within the program. Then they receive a gold seal to stick on the certificate. It's amazing how effective these things are. It's a very competitive circle and they try very hard to out-do the next guy.

This is an example of what I do each spring and fall. I take photographs of some of the participating structures. Presently we now have about 100 buildings in the program. I only analyze 16, those being the tallest structures that take the most amount of birds. I show the management where they stand in the photograph – this is spring of 1997, obviously fall of 1997, and you can see right off the bat – a picture tells a thousand words [slide shown]. You have to maintain professionalism and communication with these people, and you must be persistent. You have to keep, for lack of a better phrase, "in their face" and just let them know you are not going to go away. It's amazing how much positive results this will stir up.

What we do with these structures is analyze them and put them in a graphic format from the most lit to the least lit structures. The people down here [least lit] – they love us. The people up here [most lit] – they hate us. This encourages competitiveness among the corporations because they all want to be down here [least lit]. As a result, for example, there's one structure, the bank of Montreal – the tallest office tower in Toronto – 72 stories in fact. They were lit an average of 48% in the spring of 1998. The fall of 1998 they were only 12% lit. That's a huge reduction. Believe me, I know – I count each and every little window and I go insane doing it, but the results are very effective.

This is the closest in the Toronto area to a communication tower scenario. This is the CN Tower. For years they spot-lit their structure. In fact, when they were first built they were called the world's tallest free-standing bird killer. They took a tremendous number of bird lives. Through public pressure combined and FLAP's activities – they now extinguish the spotlighting during the migration seasons. In fact, there are red strobe lights at the side from top to bottom, and then white strobe lights at the top. We find maybe a half dozen birds now at the base of that structure. I've been there when the spotlights were on at the beginning of the migration season. There have been hundreds of birds at the base of that structure, circling in the light, flying into the concrete and each other. When the lights go out on a timer at 1:00 am, the birds that remain in flight then fall to the ground. It's like their pupils have to adjust to the sudden darkness. Then one by one they start to disappear into the darkness. There's a question as to the variation in the red strobes and the white strobes, and how they truly do have an effect on nocturnal migratory birds.

Thank you.

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