

## **Avian Mortality at Communications Towers**

A workshop sponsored by  
The United States Fish and Wildlife Service, The Ornithological Council, and The American Bird Conservancy.  
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### **Presentation Number 14**

#### **The Wireless Industry Perspective**

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#### **Al Manville's introduction of the fourteenth speaker, Sheldon Moss.**

Out next speaker is Director of Government Relations for wireless infrastructure issues with the Personal Communications Industry Association (PCIA). He directs the Association's efforts on behalf of the wireless carriers and antenna site managers. He deals with land use planning, work place safety, radio-frequency regulation compliance, and other facilities management issues. He also manages the elected Leadership Council of PCIA's Site Owners and Managers Alliance. Before joining PCIA our speaker worked in government relations with the American Feed Industry Association and he has managed issues dealing with animal health, livestock production, veterinary pharmaceutical issues, and he's also managed a diversified cattle and crop operation in Virginia's Shenandoah Valley. He holds an undergraduate degree from Montana State University and a graduate degree from Strayer University. Sheldon Moss is going to be talking about the wireless industry perspective. Sheldon.

#### **Sheldon Moss**

As Al mentioned, the Personal Communications Industry Association is a broad-based organization and we represent providers of wireless phone services, paging and wireless messenger services, and also companies that manage multi-use communications facilities. These facilities are the towers and other structures that the industry uses for transmitting and receiving their radio signals. The companies that manage many of these towers and wireless facilities specialize in co-location, where one and sometimes multiple service providers share a single structure or building to place their antennas, switches, and equipment. This substantially reduces the number of facilities necessary for providing wireless and mobile services.

We very much appreciate the opportunity to participate in this session. We also look forward to hearing from the ornithological scientists and learning more about this issue.

Let me quickly reference a body of law that we believe has a bearing on this discussion. This is the 1996 Telecommunications Act, where Congress determined that a competitive communications environment best serves the needs of all Americans and that the older monopoly-based model of telecommunications was no longer viable from the standpoint of serving the national interest. A competitive telecommunications environment is one where multiple service providers compete for the privilege of serving their customers in the marketplace. This requires providers of telecommunications services to develop independent and redundant telecommunications networks. As Holly Berland from the FCC just noted, Congress has mandated that the development of a state-of-the-art national telecommunications infrastructure is in the interest of all Americans and is a national priority. Putting this infrastructure in place will require laying many thousands of miles of copper cable and fiber optics as well as developing the facilities necessary to make optimal use of the radio spectrum.

Towers and other structures form the platform for providing a wide and diverse array of communications services. They include broadcast television and radio, cellular and personal communications services (PCS) – the new generation of digital voice services, paging, and text messaging and email, advanced iterations of traditional paging or “beeper” service. Communications towers are also necessary for providing a platform for fixed broadband services, which will provide a less expensive alternative to the copper and fiber-based networks for high speed data and Internet services. They are also needed for “wireless local loop,” which will provide residential customers a competitive option to their local phone company. These advanced services in the next few years will provide direct competition to your local telephone and cable television companies, who have grown fat and complacent by virtue of the monopoly status they have long enjoyed.

Businesses and government agencies also rely on these towers for their own in-house communications systems – including dispatch or two-way radio communications as well as more sophisticated voice and data networks. Finally, towers are essential for public safety communications. Law enforcement agencies, ambulance and other emergency services must have dependable state-of-the-art mobile communications systems. In fact, Federal law will soon require that a wireless network have the capacity to identify the specific location of a caller who has placed a 9-1-1 call from a wireless phone. Law enforcement officials and emergency management officials point to the tremendous property and lifesaving features that these new technologies will provide.

A fundamental mission of our Association is to help expedite the development of what we call “anytime, anywhere” communications. We recognize that we are in the midst of a telecommunications revolution in which all Americans have a personal stake. Whether you are a business user or a consumer, this revolution will mean lower prices, more choices, superior services, and enhanced efficiency in all areas of business. The future prosperity of our nation hinges in part on how well our country makes access to advanced and affordable telecommunications services to all Americans. I realize I probably sound a little bit like a commercial, but this is an important point that needs to be made.

In looking ahead, more towers are needed and not all of them can be built to be under 200-feet – the point at which aviation hazard lighting becomes mandatory. This is because, in order to operate effectively, many broadcast and wireless services must have antennas placed at points higher than 200 feet above the ground. Other factors often come into play. For instance, different types of wireless services have different technical and engineering requirements. Considerations such as the population density in the service area, the propagation characteristics of radio signals at different frequencies on the radio spectrum, and the service area that must be served in relation to the larger network come into play. Simply put, it is not feasible for all new towers of the future be built under 200-feet.

At the same time, our analysis indicates that only a very small proportion of new towers are actually going to be over 200-feet and require aviation hazard lighting. Assuming the estimated number of 80,000 towers in the United States over 200 feet in height is reliable, we estimate that over the next 5 to 7 years, the total increase in these taller structures will only be 4 to 6%. The overwhelming majority of new towers will be under 200 feet and will not require aviation hazard lighting.

Looking ahead, the wireless industry is committed to minimizing both the number and the overall impact of new towers. The industry is committed to co-location, where multiple carriers place their equipment on the same facility. Whenever possible, service providers locate their base stations or antennas on existing structures – not just towers but also office buildings, apartment buildings, and water tanks. The management of these towers is becoming more efficient and sophisticated and has given rise to the development of an important subset of the wireless industry – the tower and site management industry.

We concur with earlier statements made at this meeting by the FCC and the FAA that the concerns raised about bird strikes on communications towers have only recently been brought to our attention.

If you contacted the companies that manage hundreds or thousands of towers across the country, no one, from the CEO to the senior executives to the people in the field would be aware that some consider bird strikes a problem. I assure you, however, based on our involvement with this workshop and the efforts of Bill Evans and the U.S. Fish and Wildlife Service, that the wireless industry will be much more sensitive to these concerns.

In terms of working towards a solution, PCIA also agrees with what a number of people have said here today, that we need to determine the true scope and extent of the problem. We also believe if a problem is shown to exist, there should be some reliable indication that proposed remedies be commensurate with the scope of the problem. Heavy-handed regulations will not help bring about the telecommunications revolution in which all Americans have a stake.

We are also interested in determining whether collisions with lighted buildings might pose a greater threat to protected bird populations than collisions with broadcast and communications towers. An area we believe may merit further study is whether white strobe lighting is less likely to attract and disorient nocturnal migrants. If the use of strobe lighting is determined to be more “bird friendly,” the wireless industry would need the help and support of ornithological groups in educating zoning boards and community groups about why strobe lighting may be preferable to red beacon lighting.

In conclusion, our organization and our industry look forward to working with you on this.

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