The concept of bird-friendly buildings is based on the alarming results of studies linking a high number of bird deaths to avian building strikes. One study estimated that up to five percent of migratory birds are killed annually due to building collisions. Your organization can help reduce such collisions through careful building planning, design and operation.

**AT THE PORT**

The Port of Vancouver is situated along the Pacific Flyway, a north-south migratory flight path. This location, coupled with the port’s proximity to wetlands, the Columbia River, Vancouver Lake, farmland, and undeveloped upland environments make the area ideal habitat for many types of migratory and resident birds. This environment increases the importance of bird-friendly buildings.

**COLLISION CULPRITS**

Glass is a primary culprit associated with avian collisions into structures. Glass’ properties of reflectivity and transparency can cause glass to appear to be a safe flight path: reflections on glass provide images of the natural environment while transparency of glass provides clear sight lines to enticing locations. Collisions usually occur at or near ground level—the size of the building makes little difference. Another cause of collisions is artificial light. Nocturnal migrants depend heavily on visual reference to maintain orientation. Interior or exterior artificial light can lure birds into lit areas, causing birds to become disoriented and entrapped while circling in the illuminated zone. As a result, birds can succumb to exhaustion, predation or collision.

**WHAT YOU CAN DO: WINDOW SOLUTIONS**

- Design well-articulated buildings where structures are easily distinguishable from the natural environment
- Incorporate features that reduce or break-up reflections or transparency of glass: overhangs, louvers, window treatments, awnings, external screens, lattice or grill-work
- Apply to glass: fritting, etching, film or frosting
- Angle glass to 20-40 degrees versus the common 90 degrees
- Use patterned UV glass where the patterns are visible to birds, but invisible to humans (“bird-safe glass”)
- Plant lush landscape immediately adjacent to windows

**WHAT YOU CAN DO: LIGHTING SOLUTIONS**

- Avoid “up lighting” (lights pointing upward)
- Install motion sensors or timers on interior lights
- Avoid exterior decorative lighting and flood lighting
- Use lowest light lumens possible