Great Blue Heron

Nest Site

Colony sites are located on average between 2.3 to 6.5 km from their primary foraging location (Doyd and Flake 1985, Butler 1991, Custer and Galli 2002, Knight 2010). Other important factors determining nest site selection include buffering habitat to human activity (vegetation or water), lower road density and larger woodlands (Parker 1980, Gibbs and Kinkel 1997).

Colony site selection is also predator-driven. Where mammalian predators are common, herons usually select nest sites that are difficult to reach (e.g., islands, trees in swamps, high branches, etc). In some cases, colony locations are chosen in close proximity to Bald Eagle territories, likely to take advantage of the territoriality of the resident eagles (Jones 2010).

Effects of Human Activity- Disturbance By Humans

Humans impact Great Blue Herons by destruction and degradation of habitat, by disturbance of nesting colonies and key feeding areas, and by causing direct mortality (reviewed by Parnell et al. 1988, Butler 1997, Vennesland 2000). Overall, loss of habitat, particularly wetland nesting and feeding areas, may have had the strongest negative impact on the species through time (English 1978, Parnell et al. 1988, Rosenberg et al. 1991).

Human activity can disturb nesting Great Blue Herons (Werschkul et al. 1976; Simpson and Kelsall 1978; Vos et al. 1985, Parnell et al. 1988, Skagen et al. 2001). Human disturbance in general has been linked to reduced nesting productivity (Carlson and McLean 1996, Vennesland 2000, Gebauer and Moul 2001, Vennesland and Butler 2004). And several studies have linked abandonment of Great Blue Heron colonies to human activity, including housing and industrial development, highway construction, logging, vehicle traffic, and repeated human intrusions (Kelsall and Simpson 1979, Drapeau et al. 1984, Forbes et al. 1985b, Leonard 1985, Vennesland and Butler 2004; see also reviews by Parnell et al. 1988, Rodgers and Smith 1995, Carney and Sydeman 1999, Vennesland 2000).

Egg and nestling predation (by eagles, crows and ravens) has been reported from disturbances caused by humans and eagles (Kelsall and Simpson 1978, Quinney 1983, Drapeau et al. 1984, Simpson 1984, Moul 1990).

Buffers are commonly recommended to limit human disturbance near colonies, both on land (e.g., Vennesland 2004) and in the air (e.g., Markham and Brechtel 1978). Carlsen and McLean (1996) showed that breeding productivity was higher at sites with stronger barriers (e.g. ditches and fences), suggesting that isolating colonies can be effective.