Ashraf F ELHoubi* (aelhoubi@jcu.edu), College of Business, Dept. of Information Systems and Analysis, 4400 MLK Blvd. P.O.Box 10025, Beaumont, TX 77710-0025. Sample Size Issues in Resource Selection Studies.

Resource selection by animals has received a great deal of attention recently, especially in terms of estimation of resource selection functions for various wildlife species. There are several statistical modeling techniques for resource selection. Common models in the resource selection literature, such as logistic regression, assume units are sampled randomly and independently.

Currently researchers in the resource selection studies are interested in how they should sample their used and available points especially with existing technological tools, such as GIS and GPS that provide biologists access to a large number of available data points. In this talk I present techniques used in the resource selection studies, and some simulation studies about how one should use sample size, and I presents some recommendations based on these simulation studies. (Received September 10, 2006)