Islamic Republic of Iran best conserved the sturgeon stocks while laissez-faire capitalism in America and in post-Communist Russia completely failed these fishes. Most sturgeons are now considered in imminent danger of extinction and some are probably only maintained by hatchery stock.

The caviar industry in former Soviet waters of the Caspian Sea is detailed along with modern skullduggery. The caviar industry in Iran is less well covered and the historical mischief there has not been investigated by the author. Apparently the fisheries in Iran were first granted by the government to Stepan Martinovitch Lianozoff, an Armenian subject of Czarist Russia in the 1870s, regularly renewed. In 1896 the lease was renewed at an annual cost of 450,000 gold francs. In one version of events, Martin (the grandson of Stepan) disappeared in 1923, kidnapped while meeting two ravishing Armenian sisters, leaving only a letter ceding his rights in the caviar fishery to the Soviets. Another version simply has Martin selling his rights to the Soviet Government.

There is a longish review of the origin of the word caviar, based apparently on one man's quest to prove it is Greek. However the word caviar may come from the Farsi "chav-jar" meaning "a cake of strength or power" or "bread of lovers" in allusion to its reputed aphrodisiac qualities; havyar in Turkish means "fish eggs" but this may be of more recent derivation.

The procedures for catching sturgeons, for extracting and processing their eggs as caviar is well described. The bodies were often simply discarded, but some sturgeons have also been utilised for their flesh and the author waxes lyrical on her personal experience of the taste. Simply cooked stellate sturgeon, however, can be execrable (at Bandar Shah on the Iranian shore from my experience).

Perhaps the most disappointing aspect of this book is its lack of illustrations. Sturgeon, their fisheries and habitats, caviar, and the caviar-processing factories are all good photographic subjects and are readily available. The author paints some excellent word pictures, for example in her depiction of the now lost town of Caviar, USA, but it is always fascinating to compare the word and the figure.

The book is a compelling read for anyone interested in the loss of a great and renewable natural resource and an instructive guide to the failings and successes of political systems when attempting to manage species of great value.

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Resource Selection by Animals

By B. J. Manly, L. L. McDonald, D. L. Thomas, T. L. McDonald, and W. P. Erickson. 2002. Kluwer Academic Publishers, Dordrecht. 221 pp. U.S. $78.00.

This second book of papers recently presented at the First International Conference on Resource Selection by Animals in Laramie, Wyoming is truly a bible for wildlife researchers. The authors present Resource Selection Functions (RSF) as a unified theory for the study of resource selections and how to quantify them.

The focus of this book is the statistical aspects of resource selection as relevant for any Wildlife and Fisheries Biologists. This key publication defines "resources" as food and habitat. Much confusion exists in the wildlife literature about use, selection and preference of habitat and food, but the authors provide brilliant clarification: "Selection is the process in which an animal chooses a resource, and preference is the likelihood that a resource will be selected if offered on an equal basis with others (Johnson 1980)". Addressing habitat preferences is the key to managing wildlife habitats efficiently. Obviously, one can only derive preference when resource availability is known; a topic of debate. "However, if we learn there is selection for or against a resource then this is a starting point for further in depth study". This is a drawback for spatial applications of RSFs since they deal mostly with pure abundances; e.g., presence/absence or densities. Although a first step to knowing resource preferences, a pure abundance view can be misleading and, as the authors note, it can only be a basis for more in-depth studies. RSFs likely should also address fitness and relevant ecological processes; topics of future research.

The general RSF concept is actually quite old, and its first application dates back as early as the 1920s by A. Scott. The first edition of this book was published in 1993, but the updated second edition also includes such advanced topics such as AIC, GIS, Risk Assessment, Alternative Modelling Methods, Discrete Choice Models and spatial species predictions. Personally, I find that this new version is much more readable than the previous one.

All important RSF sampling design issues are addressed: Sampling Protocols A, B and C, and Design I (Populations), II (Individuals) or III (each Animal). Also, all assumptions for using RSFs successfully are

explained. "The availability of various resources is not generally uniform in nature, and use may change as availability changes". This is particularly true when the scale of the study changes; therefore, multiscale RSFs are recommended.

Ultimately, almost any radio-telemetry study will apply RSFs sooner or later. The beauty of RSFs is that they can be used for such a huge variety of applications; most of them deal with wildlife species, but the book also shows an example that deals with pre-historic site preferences of Maya settlements. There is almost nothing to stop the RSF concept being used for botany.

This nicely structured book is divided into 14 chapters, a summary and exercises. A full list of symbols is given, which facilitates the understanding of the terminology and formulas greatly. The book also presents some RSF computing advice; e.g., short SAS software codes. In addition, the wildlife biologist will also appreciate the seven pages of RSF-references, and the many examples that deal with classical wildlife studies, for instance the ones by Neu et al. 1974 (Moose habitat selection), Ryder 1983 (Pronghorn wintering habitat), Harris 1986 (Fernbird nest site selection), Popham 1944 (Minnows foraging on Corixids) and Bartunock et al. 1976 (animals depleting their prey). Further, sample datasets are also presented (but not in digital format).

The book is also very strong in presenting all common indices of selectivity. RSFs can be used to assess old-fashioned HSI (Habitat Suitability Index) and Habitat Capability mapping and even to quantify ecological wildlife niches. As the experienced authors state, it is hoped that RSFs replace less powerful ad hoc methods.

Most of the authors of this book are affiliated with Western EcoSystems Technology Inc., a well known environmental NGO (non-governmental organization) in Cheyenne, Wyoming, which sets world standards when it comes to RSFs. The authors make clear that most RSFs are correlational *per se.* Specifically RSF-GIS studies are exploratory, pointing towards new hypothesis and field studies. The GIS chapters are very timely, readable and will be appreciated by the scholar, although this chapter is relatively slim. The use of "spatial bins" and Remote Sensing imagery is shown,

but for instance the use of aspect is not explained nor is how to correct for terrain slope underestimations in 2-dimensional GIS mapping. Another topic not fully addressed is statistical model selection when many predictors are involved; e.g., as commonly encountered in modern GIS studies; the Burnham and Anderson (2002) reference is still required. Another good set of additional references to keep in mind is the ones dealing with DISTANCE Sampling, e.g. Buckland et al. (2001), to derive absolute abundances (densities). Many RSF applications rely on high quality wildlife survey data.

In times of literally "exploding" data availabilities; e.g., via the WWW, the reviewer is personally convinced that Neural Networks will play a major role on the future RSF field; and the authors give credit to these and to other algorithms and approaches such as Compositional Analysis and Mahalanobis Distance. Applications of jackknifing and bootstrapping are shown as well. Despite the extremely good coverage for RSFs in this book, Resource Selection Probability Functions (RSPFs) are less well described. Color graphs are not given, but therefore this "bible" is affordable. It is really impressive to read the sections on how RSFs can be used for Spatial Predictions, Risk Assessment of Future Actions and Population Viability Analysis; e.g., Boyce and McDonald (1999).

This book presents well-structured and sound information for the advanced, as well as for the general wildlife biologist. It is a reference on "how to". Some people suggested that this book has an index problem as the latter is only two pages long and has mis-matching page numbers. However, this should not hold back anyone from reading this book. It is simply a must for any wildlife biologist and conservationist. Without RSFs, efficient research and conservation of wildlife and habitat resources is impossible. It is hoped that this brilliant book will aid safeguarding these resources.

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All-Weather Hawk Watcher's Field Journal

This handy pocket field notebook, 12 by 17.5 cm., consists of a conservation note, a one-page introduction, a three-page list of the diurnal birds of prey of North and Central America, and 51 pages for field observations. At the top of each page are blanks to

fill in for date, time, weather, and location, including GPS coordinates. The special feature is the use of all-weather writing paper so that one can write in the rain!

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