The Sturgeons (Acipenseridae) in Dean's "Bibliography of Fishes"[1]

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Abstract

This account presents the references pertaining to sturgeon, i.e., fishes of the Family Acipenseridae, that were included in 'A Bibliography of Fishes', published by the American Museum of Natural History in 3 volumes in 1916, 1917 and 1923 under the editorship of Bashford Dean, Charles R. Eastman, Eugene W. Gudger and Arthur W. Henn. Altogether, over five hundred references were extracted whose titles explicitly referred to sturgeon or which, in few cases, were known to contain information on sturgeon. In most cases, the names of the periodicals where articles on sturgeon appeared were expanded, such as to assist in tracing and citing them.

Introduction

The scientific literature on fishes is hugely scattered, as the literature on other widespread and culturally important organisms probably also is. This situation applies especially to the literature of the 19th and preceding centuries published in different formats and a dizzying array of European languages. Fortunately for fish, Bashford Dean's *Bibliography of Fishes* captures much of that literature, if only in the form of well-indexed titles (many translated into English or German). This bibliography is available online (see www.biodiversitylibrary.org/bibliography/11857), but its items are accessible only when the correct search term is provided.

Titles from Dean's bibliography pertaining explicitly to sturgeon are presented below to support planned biological and historical work on sturgeons worldwide. They include the 24 recognized species of the family Acipenseridae that were described at that time. Two other recognized species, *Acipenser desotoi* Vladykov 1955, and *Scaphirhynchus suttkusi* Williams & Clemmer, 1991 were described after the publication of the bibliography, for a total of 26 currently recognized species (see FishBase; www.fishbase.org).

Here, 'explicitly' refers to the publications that include sturgeon or one of its cognates (e.g., sturgeon, steur, Stör, sturio, etc.) or the common or scientific name of an acipenserid taxon (e.g., beluga, sterlet, *Scaphyrhinchus, A. ruthenus,* etc.).

References were included here if their *title* referred to sturgeon, i.e., excluding contributions which contained information on sturgeon (e.g., as element of species list) without being explicit about it. The few exceptions to this have attached to them either editor's comments mentioning '*Acipenser*' (or another relevant term), or a footnote with the reason for their inclusion (e.g., because they contained original

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descriptions of sturgeon species). Two other exceptions are books by Charles Darwin, who published extensively on "ganoid" fishes, which include sturgeon[2] and which he considered to be "living fossils."

We have checked and extended the abbreviated titles using a number of online sources including the Biodiversity Library (www.biodiversitylibrary.org), the Illinois Natural History Survey - Nomenclatura Oligochaetologica (www.inhs.illinois.edu/people/mjwetzel/nomenoligo/), and the Scholarly Societies Project (www.references.net/societies/history/abbrevA.html).

The overwhelming majority of references were identified by reading through the 2162 pages (in 3 volumes) of Dean's Bibliography and verifying them with the online version, which was based on optical character recognition (OCR) and generated a very small number of reading errors. We note that the original bibliography had, in French, German and English - languages we master - few typographic errors for a work of this complexity and scope. Earlier laudatory reviews of Dean's Bibliography[3] do not mention this fact, but it is crucial in such works.

The material immediately following the acknowledgements consists of an index to the references dealing the family Acipenseridae, reproduced from volume 3 of Dean's Bibliography. The number after the date is used to distinguish between contributions by the same author in the same year. The star (*) is used to identify contributions deemed 'excellent' by the editors of Dean's Bibliography. The actual references are listed after the index. Most of the references originate from Volume 1 (A-K), or from Volume 2 (L-Z); when they originated from Volume 3, they are either labeled 'Anonymous' ('Anon.'), 'Addenda' ('Add') or 'Pre-Linnean' ('Pre-Linn.').

Acknowledgements

We thank colleagues for checking references in their mother tongue and for additional corrections and comments: Johannes Müller (Dutch), Nicolas Bailly (French), Simone Libralato (Italian), Evgeny Pakhomov and Alexei Orlov (Russian) and Villy Christensen (Danish and Swedish).

[2] Only two books by Charles Darwin are mentioned in Dean's Bibliography ('*The Voyage of the Beagle*' and '*The Descent of Man*') despite fishes being mentioned in many more of his publications (see Pauly, D. 2004. *Darwin's Fishes: an encyclopedia of Ichthyology, Ecology and Evolution*. Cambridge University Press, Cambridge, xxv + 340 p.). *Darwin's Fishes* documents that he wrote extensively on "ganoid" fishes, which include sturgeon. However, his only explicit (and very brief) mentions of sturgeon are in his (published) marginalia.

[3] Kingsley, J.S. 1924. Dean's bibliography of fishes. *The Anatomical Record* 27(3): 175-176; Jordan, D.S. 1924. Dean's Bibliography of Fishes. *Science* 59: 17-18.

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Russian species:	Golowatschow, A. 1857.1
	Lovetsky, A. 1834.1
European forms:	Heckel, J.J. 1851.3
Synopsis-Japanese forms:	Jordan, D.S. & Snyder, J.O. 1906.4

Caucasian forms, including those from Caspian and Black Seas:

	*Kavraiskiĭ T.T. 1907.1
	Sodoffsky, W. 1849.1
Review-North American forms:	Kirsch, P.H. & Fordice, M.W. 1890.1
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	*Ehrenbaum, E. 1896.1, Add. 1913.3
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[4] 'Bohemian' is an older name for Czech, a Slavic language.

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[5] Species names in square brackets were inserted in the titles of many references by the editors of Dean's Bibliography.... when they could ascertain their identity. They also added explanatory comments (in very small font, as reproduced here) under some references.

[6] Original description of *Acipenser medirostris* Ayres, 1854.

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Fishes of St. Lawrence River and Lake Champlain; fishing for gar pike and sturgeon in Lake Champlain: eel fishing in Canada. This "Histoire' as a whole or in parts passed through a number of eds.: Paris, 1749; Leyden, 1750 (Dutch); Göttingen & Amsterdam, 1750; The Hague, 1760; London, 1761; and more recently New York, 1865.

Coenen, Adriaan. 1577. Vischboek van Adriaan Coenen, zoon van Schilperoort. Dit Vis, Booc, veergadert ende gescreven van mij A. Coenen soen, geboren op de dorpe van Scheiveninghe Een visschers dorpe in de Noortsee leggende een cleijn mijlken van den vermaerden Hage in Hollant die is in veel landen wel bekent. Anno 1577 begonnen (-1578) . [Pre-Linn. 1577.1]

[7] Includes the original description of *Acipenser baerii* Brandt 1869.

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[8] There is a modern facsimile edition of this manuscript by Florike Egmond: Egmont, F. Het Visboek. De wereld volgens Adriaen Coenen 1514 – 1587 (Amsterdam: Walburg Pers: 2005).

[9] This species, known as Yangtze sturgeon was declared extinct by the IUCN as of July 21, 2022; en.wikipedia.org/wiki/Dabry%27s_sturgeon

[10] This was a transcription error; the original reads correctly 'Über den Stör'.

[11] Original description of *Scaphirhynchus albus* (Forbes & Richardson, 1905).

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[24] Original description of *Acipenser stellatus* Pallas, 1771.

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