

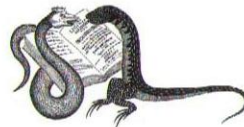
J. G. Schneider's
Historiae Amphibiorum

Herpetology at the Dawn
of the 19th Century

Translation, Introduction, and Notes by
Aaron M. Bauer* & **Esteban O. Lavilla[§]**

* Department of Biology and Center for Biodiversity and Ecosystem Stewardship,
Villanova University, 800 Lancaster Avenue, Villanova, Pennsylvania 19085, USA.

§ Unidad Ejecutora Lillo (UEL) - CONICET/Fundación Miguel Lillo,
Miguel Lillo 251, 4000 - San Miguel de Tucumán, Argentina.



SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES

in cooperation with the International Society for the History and Bibliography of Herpetology

Table of Contents

Note: Only taxa organized by Schneider into separate accounts are listed here; other species discussed, sometimes at length, may be searched in the Taxonomic Index. For the translation, the page on which each section begins in Schneider's original is indicated in parentheses immediately following the section name. The pagination in this translation appears at the right of the columns.

The Life and Work of Johann Gottlob Schneider		ix
Biography		ix
Scholarly Research and Publications		xvi
Herpetological Works		xxii
<i>Historiae Amphibiorum</i>		xxxii
Schneider's Lasting Influence		xxxix
Bibliography of Johann Gottlob Schneider		xli
Lectori Auctores		lv
Images		lix
Acknowledgements		lx
Literature Cited		lxi
Natural and Literary History of Amphibians First Volume, containing		
<i>Rana, Calamita, Bufo, Salamandra and Hydrus</i> (i)		1
Dedication (iii)		3
From the author to the reader (ix) . . .		7
<i>Salamandra</i> ([xv])		11
<i>Terrestris</i> (54)		40
<i>Cristata</i> (57)		42
<i>Taeniata</i> (58)		43
<i>Palustris</i> (60)		44
<i>Pruinata</i> (69)		47
<i>Alpestris</i> (71)		48
<i>Carnifex</i> (71)		48
<i>Palmata</i> (72)		48
<i>Japonicus</i> (73)		49
Class Amphibia Second Order		
[Salientia] (79)		53
<i>Rana</i> (111)		71
<i>Temporaria</i> (113)		73
<i>Esculenta</i> (115)		74
<i>Ocellata</i> (116)		74
<i>Dorsigera</i> (121)		78
<i>Cornuta</i> (125)		80
<i>Spinipes</i> (129)		82
<i>Fusca</i> (130)		83
<i>Ovalis</i> (131)		83
<i>Pipiens</i> (133)		85
<i>Paradoxa</i> (134)		85
<i>Cyanophlyctis</i> * (137)		87
<i>Lineata</i> (138)		88
<i>Spinipes</i> (139)		88
<i>Breviceps</i> (140)		88
<i>Systema</i> (144)		92
<i>Acephala</i> (146)		92
Doubtful Species (148)		94
<i>Marginata</i> (148)		94
<i>Persica</i> (149)		95
<i>Austrasiae</i> (150)		95
<i>Calamita</i> (151)		97
<i>Arboreus</i> (153)		99
<i>Bicolor</i> (156)		100
<i>Bicolor</i> female (160)		103
<i>Maximus</i> (163)		104

*now cyanophlyctis

<i>Boans</i> (164)	105	<i>Vespertinus</i> (225)	136
<i>Leucophyllata</i> (168)	107	<i>Ridibundus</i> (226)	136
<i>Quadrilineatus</i> (169)	107	<i>Arunco</i> (226)	136
<i>Punctatus</i> (170)	108	<i>Thaul</i> (227)	137
Doubtful Species (172)	109	<i>Rubeta</i> (227)	137
<i>Fasciatus</i> (172)	109	<i>Rufus</i> (230)	139
<i>Melanorabdotos</i> (173)	110	<i>Arboreus</i> (231)	139
<i>Cinereus</i> (174)	111	<i>Siamensis</i> (231)	140
<i>Fuscus</i> (174)	111	Class Amphibia Fourth Order,	
<i>Tinctorius</i> (175)	111	Serpentes (233)	141
<i>Bufo</i> (177)	113	<i>Hydrus</i> (233)	141
<i>Cinereus</i> (185)	117	<i>Colubrinus</i> (238)	146
<i>Igneus</i> (187)	118	<i>Fasciatus</i> (240)	147
<i>Cruciatus</i> (193)	121	<i>Bicolor</i> (242)	148
<i>Fuscus</i> (196)	123	<i>Granulatus</i> (243)	149
<i>Viridis</i> (200)	124	<i>Caspus</i> (244)	150
<i>Typhoniuss</i> (207)	127	<i>Enhydris</i> (245)	150
<i>Salsus</i> (213)	130	<i>Rynchops</i> (246)	151
<i>Clamosus</i> (214)	130	<i>Piscator</i> (247)	151
<i>Semilunatus</i> (215)	131	<i>Palustris</i> (249)	152
<i>Melanostictus</i> (216)	132	Additions to the History of	
<i>Nasutus</i> (217)	132	Salamanders (251)	154
<i>Guttatus</i> (218)	132	Interpretation of the Copperplate	
<i>Marinus</i> (219)	133	Engravings (256)	156
Doubtful Species (222)	134	Corrigenda (unpaginated)	161
<i>Scaber</i> (222)	134	Plates (unpaginated)	163
<i>Sitibundus</i> (225)	135		

**Natural and Literary History of Amphibians Second Volume,
containing *Crocodilus*, *Scincus*, *Chamaesaura*, *Boa*, *Pseudoboa*, *Elaps*,
Anguis, *Amphisbaena* and *Caecilia* (i) 167**

Preface (iii)	169	<i>Sepiformis</i> (191)	265
<i>Crocodilus</i> (1)	173	<i>Brachypus</i> (192)	266
<i>Siamensis</i> (157)	244	<i>Niloticus</i> (195)	268
<i>Porosus</i> (159)	246	<i>Punctatus</i> (197)	270
<i>Longirostris</i> (160)	247	<i>Quinquelineatus</i> (201)	271
<i>Trigonatus</i> (161)	248	<i>Trilineatus</i> (202)	272
<i>Sclerops</i> (162)	248	<i>Gigas</i> (202)	273
<i>Carinatus</i> (164)	249	<i>Chamaesaura</i> (205)	275
<i>Opholis</i> (165)	250	<i>Chalcis</i> (207)	277
<i>Palmatus</i> (166)	250	<i>Cophias</i> (209)	278
<i>Pentonyx</i> (167)	251	<i>Anguinea</i> (210)	279
<i>Scincus</i> (171)	253	<i>Abdominalis</i> (211)	279
<i>Officinalis</i> (174)	256	<i>Propus</i> (211)	280
<i>Aurata</i> (176)	257	<i>Apus</i> (212)	280
<i>Carinatus</i> (183)	260	<i>Bipes</i> (213)	281
<i>Variiegatus</i> (185)	262	<i>Ventralis</i> (215)	282
<i>Laticeps</i> (189)	265	<i>Boa</i> (217)	283

<i>Murina</i> (240).....	296	<i>Furcatus</i> (303).....	331
<i>Canina</i> (242).....	297	<i>Anulatus</i> (305).....	331
<i>Hypnale</i> (243).....	298	<i>Anguis</i> (307)	333
<i>Hortulana</i> (245).....	299	<i>Fragilis</i> (309).....	335
<i>Constrictrix</i> (247).....	300	<i>Eryx</i> (315).....	338
<i>Scytale</i> (248).....	301	<i>Cerastes</i> (317).....	339
<i>Cenchrus</i> (250).....	302	<i>Jaculus</i> (319).....	339
<i>Amethystina</i> (254).....	304	<i>Meleagris</i> and <i>Miliaris</i> (320) ..	340
<i>Merremi</i> (259).....	306	<i>Melanostictus</i> (323).....	341
<i>Ordinata</i> (260).....	307	<i>Clivicus</i> (324).....	342
<i>Carinata</i> (261).....	307	<i>Reticulatus</i> (325).....	342
<i>Reticulata</i> (264).....	309	<i>Maculatus</i> (328).....	343
<i>Rhombeata</i> (266).....	310	<i>Corallinus</i> and <i>ater</i> (331).....	345
<i>Hieroglyphica</i> (266).....	310	<i>Rufus</i> (333).....	346
<i>Conica</i> (268).....	311	<i>Scutatus</i> (336).....	347
<i>Anguiformis</i> (269).....	311	<i>Gronovianus</i> (338).....	348
<i>Cinerea</i> (270).....	312	<i>Colubrinus</i> (338).....	348
<i>Castanea</i> (272).....	313	<i>Typhlopes</i> * (339).....	349
<i>Albicans</i> (274).....	314	<i>Lumbricalis</i> (339).....	349
<i>Orbiculata</i> (276).....	314	<i>Crocotatus</i> (340).....	349
<i>Pseudoboa</i> (281)	317	<i>Fasciatus</i> (340).....	350
<i>Fasciata</i> (283).....	319	<i>Cinereus</i> (341).....	350
<i>Caerulea</i> (284).....	320	<i>Septemstriatus</i> (341).....	351
<i>Carinata</i> (285).....	320	<i>Oxyrynchus</i> (341).....	351
<i>Coronata</i> (286).....	321	<i>Ventralis</i> (342).....	351
<i>Contortrix</i> (286).....	321	<i>Granulatus</i> or	
<i>Krait</i> (288).....	322	<i>Acrochordus</i> (344).....	352
<i>Elaps</i> (289)	323	<i>Amphisbaena</i> (347)	355
<i>Lemniscatus</i> (291).....	325	<i>Langaha</i> (357).....	361
<i>Lacteus</i> (293).....	326	<i>Caecilia</i> (359)	363
<i>Plicatilis</i> (294).....	326	Addenda (369).....	369
<i>Cobella</i> (296).....	327	Plates (unpaginated)	373
<i>Duberria</i> (297).....	328		
<i>Octolineatus</i> (299).....	328		
<i>Bilineatus</i> (299).....	329		
<i>Boaeformis</i> (301).....	329		
<i>Anguiformis</i> (302).....	330		

* We follow McDiarmid et al. (1999) in regarding Schneider's use of "Typhlopes" to be in the vernacular, rather than a formal group name.

Literature Cited	377
Indices	453
Index to Personal Names.....	453
Institutional Index.....	465
Taxonomic Index.....	473
Illustrations Referenced in <i>Historiae Amphibiorum</i>	501
Images cited by Schneider in <i>Historiae Amphibiorum</i>	502
Additional images referred to in footnotes.....	767

The Life and Works of Johann Gottlob Schneider

Biography

Johann Gottlob Theaenus Schneider (1750–1822; Figure 1) was born on 18 January 1750 in Kollmen (or Kolmen), now Collm (Figure 2:1), 45 km east of Leipzig in what is today the Landkreis Leipzig in the Freistaat Sachsen (Free State of Saxony)ⁱ. His father had been a mason. As a boy he went to live with a childless maternal uncle about 40 km northeast of Kollmen, in Elsterwerda (Figure 2:2), now in the Bundesland of Brandenburg. At the time of Schneider's birth, however, both towns were in the Kurfürstentum Sachsen (Electorate of Saxony), a part of the Holy Roman Empire. During the Third Silesian War, in 1756, however, Saxony was invaded by its powerful neighbor Prussia, regaining its sovereignty only in 1763. This was to become the story of Schneider's life — a proud Saxon, destined to live in and serve the Prussian state.

Following his primary education in Elsterwerda, Schneider was sent to the *Landes-*schule** in Pforta (Figure 2:3, Figure 3) near Naumburg, then in the Electorate of Saxony and now in the Bundesland of Saxon-Anhalt. This was already a venerable institution, two centuries old in Schneider's time. Other alumni include the naturalist Christian Gottfried Ehrenberg (1795–1876), the mathematician August Ferdinand Möbius (1790–1868), and philosophers Johann Gottlieb Fichte (1762–1814) and Friedrich Nietzsche (1844–1900). At Pforta Schneider's proficiency in Greek and Latin resulted in the suggestion by his instructors that he continue his education in philologyⁱⁱ at the University of Leipzig, despite the wishes of his uncle, who wanted him to pursue a legal career. Nonetheless, in 1769 he moved to Leipzig (Figure 2:4) to study philology. Aside from being the closest major university to his home, Leipzig offered him access to Johann Jakob Reiske (1716–1774), a specialist in Arabic and Byzantine philology and one of the few scholars in Germany whose linguistic knowledge of Greek was truly exceptional. Johann Friedrich Fischer (1726–1799) and Friedrich Wolfgang Reiz (1733–1796) were other classical scholars who influenced him there, although he was not the most regular attendee of their lectures. Schneider's interests in the natural sciences were also developed at Leipzig, although whether this was through lectures he attended (unlikely) or entirely the result of his own efforts is unknown.

i Not to be confused with the village of Kollm, also in Saxony, but in the Landkreis Dresden, approximately 20 km northwest of Görlitz. The year of Schneider's birth was erroneously given as 1752 by some sources (e.g., Meusel 1798; Anonymous 1822).

ii Philology is a field of scholarship that deals with the study of written and oral records and attempts to determine their authenticity, original form and meaning. It is the nexus of linguistics, history, textual criticism and literary criticism. Schneider was a classical philologist, studying principally Greek and Roman sources.

Lectori Auctores

As outlined above, Johann Gottlob Schneider was, in addition to the zoologist that concerns us most here, a prolific classicist, having edited and published editions of the works of Aristotle, Aelian, Nicander, Epicurus, Theophrastus, Xenophon, Vitruvius and Pindar, among others. This provides some context to the way in which the *Historiae Amphibiorum* was written. The dedication to Joseph Banks that opens the first volume was a text rich in images, full of subordinates and with only one period marking the boundary between the two sentences of the single paragraph spread over five pages. The Latin in Schneider's texts has been characterized as difficult to translate (see Karrer et al. 1994) and we would certainly agree that this is the case of his dedication. The author's "to the reader" section is, because of its content, less exuberant but still rich in various rhetorical resources, while the main body, which begins with the characterization of the genus *Salamandra*, is developed in the usual academic Latin, common among the naturalists of the 18th century. Consequently, for both the dedication and the author's notes for the reader, we provide an adaptation or free translation, shortening sentences and modifying wording and punctuation to make them more readable while still maintaining the sense and flourish of the original text. The "scientific" section is more of a literal or direct translation, although modified when necessary to keep the sense for the modern reader. The order of clauses, in particular, has frequently been changed to improve flow and in some cases we have changed wording significantly when we believed that the strict translation would be confusing or awkward. We acknowledge that we may have introduced inadvertent errors in places, and take full responsibility for these.

The genesis of this book was a desire to make Schneider's work, with its many descriptions and reviews of the literature of antiquity, available to the broader herpetological community for whom the Latin text was largely inaccessible. When we conceived of this project, we originally thought to augment the translation by providing full citations to the many works cited by Schneider. Like virtually all authors of his time, he provided no bibliography and the often very incomplete clues as to the identity of the works sometimes required extensive research, particularly when a particular work would have been available to Schneider in numerous different editions. When possible, because of explicit page citations by Schneider, we identified the edition or translation he used. When this was not possible, we provided one or more citations to editions he may have plausibly used, or to the first printed edition of the work. Works cited by Schneider appear with an asterisk in the literature cited section following the translation. Ultimately, we have identified nearly all of the works cited and in all but a very few cases we have personally verified these works either in hard copy or digitized versions of the original works. In this respect the Biodiversity Heritage Library (<https://www.biodiversitylibrary.org/>), AnimalBase (<http://www.animalbase.org/>), the Bayerische Staatsbibliothek (<https://www.bsb-muenchen.de/>), Google Books (<https://books.google.com/>), the Bibliothèque Nationale de France (<https://gallica.bnf.fr/>), Hathi Trust (<https://www.hathitrust.org/>) and Gale Group Eighteenth Century Collection (<https://www.gale.com/primary-sources/eighteenth-century-collections-online>) were invaluable resources.

As we progressed, we recognized that we could do more to make the *Historiae Amphibiorum* useful to readers. At first, we realized that many of the collections used by Schneider were no longer extant. Many were private collections, and even some institutional collections had been "lost" over time or absorbed by others. "Mini-histories" of these collections thus became the first non-bibliographic annotations included with the book. However, this led to the need for "mini-biographies" of the many persons, both ancient and modern, mentioned by Schneider. To this were added the identification of unfamiliar geographic terms, comments on the dating of particular works, definitions of ancient units of measurement, etc. Finally, the current equivalents of all of Schneider's taxon names and the current whereabouts of the specimens he mentioned were also added. In the end 1748 footnotes accompany the translated text. We contemplated using endnotes, but it became clear to us that it made more sense to keep the notes close to the relevant text and it is our expectation that readers will want or need to consult these as they use the book. In the end, fleshing-out the text in this way has, we believe, brought new life to this now 220-year-old treatise. If we have done our job, herpetologists going forward will have both easier access to Schneider's original work and a better context for understanding how research in natural history and taxonomy was carried out at a critical time in the development of herpetology as a discipline.

As far as possible we have followed Schneider's original formatting of the text. However, he was highly inconsistent in his use of conventions so we retained what we could of Schneider's presentation while trying to facilitate use by readers by imposing more uniform conventions wherever possible. Writing in Latin he usually declined the scientific names, except when used in the headers to the species accounts, and he neither consistently italicized binominal names nor capitalized generic names. We have uniformly presented these names, in italics, in the nominative case. When it was clear that he was using the name in the sense of the Latin vernacular we used the equivalent English term (e.g., *rana arborea* = treefrog). Author names and the names of publications were likewise declined by Schneider but are presented by us in the nominative case.

Schneider often, but not always, italicized the names of authors and more rarely italicized the titles of books or journals. We have used small caps for personal names throughout (except when the name was used in an adjectival form, e.g. LINNAEUS but Linnaean). Titles, such as King, Prince, Graf or Freiherr are not printed in small caps, but geographic terms normally associated with names are; thus, Prince WILLEM V OF ORANGE or ANTIGONUS OF CARYSTUS. For modern names other modifiers were not printed in small caps, but for classical names they were, thus JOHANN HEINRICH LINCK the Younger, but PLINY THE ELDER. We also used the form of names that we believed would be most familiar to readers, regardless of Schneider's usage. Thus, HADRIAN not HADRIANUS, HOUTTUYN not HUTTUIN, RUSSELL not RUSSEL, and MARCGRAVE not MARCGRAVIUS or MARGRAFF (see also footnote v in this introductory essay for comments on other names with variable spellings). Wherever this might be confusing we have explained our choice in a footnote. In some cases we have kept Schneider's original spelling of names, even if incorrect or variable, but again these have been highlighted and commented upon.

We used italic small caps for the names of published works. This was limited to journal or book titles. Books within classical works, as well as chapters or other sections are not presented in this style. Schneider usually presented quoted passages in languages other than Latin (most often French but other modern languages too) in italics. We apply this convention universally, even when Schneider himself used a different style, and provide footnotes indicating the original language. Schneider also used italics for emphasis or to

pointedly compare specific wording. We have retained this use of italics when it was clear to us (and hopefully to our readers) that this is what was intended.

Specific citations are included for many biographical, geographical, historical and taxonomic subjects treated in the footnotes. These references appear in the literature cited section without initial asterisks. However, when only more general information is provided (uncontested dates of birth or death, “common knowledge” historical information, etc.) we did not cite specific sources. Further details for most of the footnotes relating to the people, places and events of classical antiquity may be found in Warner (1910), Sacks (1995) and especially Hornblower et al. (2012), *The Oxford Classical Dictionary*, 4th edition.

In addition to the literary history of amphibians and reptiles, Schneider’s work was a natural history as well, in which he presented his own and other contemporary observations on biology and discussed the specimens he examined and the works he had read that informed his opinions as to the validity of species and their allocation to genus. For each name mentioned by Schneider we provide its current name in a footnote at the beginning of each species account, or at its first mention if the name does not appear in a separate account. In some cases current names may be provided more than once, typically if the first use of the name is substantially before the main species account. Names used in the book that today are synonyms of other *nomina* are linked to the current name in use by “syn.” Names that are now placed in a different genus than used by Schneider are linked to the current combination by “=.” Within the footnotes, names coined by Schneider are printed in bold font. We used italics for Latin terms relating to nomenclature such as *species inquirenda*, *nomen nudum*, *error typographicus* and *fide* but did not italicize routine terms such as et al., et seq., l.c., and e.g.

Footnotes also provide information regarding type specimens and other material examined by Schneider. For private collections or those no longer extant, we employ the collection name in full or abbreviated form, but specimens that are extant in modern collections use standardized codes (Sabaj 2020). These are: LACM = Natural History Museum of Los Angeles County, USA, NHM-BS = Staatliches Naturhistorisches Museum, Braunschweig, Germany, NRM = Naturhistoriska Riksmuseet, Stockholm, Sweden, UUZM = Uppsala Universitet, Evolutionsmuseet, Uppsala, Sweden, ZISP = Zoologisches Institut, Rossiiskoi Akademii Nauk, St. Petersburg, Russia, and ZMB = Museum für Naturkunde, Berlin, Germany.

In our literature cited section we distinguish between works cited by Schneider himself (preceded by an asterisk) and those referred to in our footnotes. Except for the few cases noted as “[not seen]” all citations were checked by reference to either a hard copy or a digitized version. Bibliographic data were often compared with that available through WorldCat (<https://www.worldcat.org/>), a global database of research libraries. Digitized versions of sources were located on a variety of platforms (see above), and/or with original copies of the books in the authors’ personal libraries.

For the oldest books, particularly incunabula, most confirmation was done via digitized versions, especially as the stage of double-checking all references fell within the period of the covid-19 pandemic when physical access to most libraries was not possible. Incunabula and, to a lesser extent, 16th century books often have bibliographic uncertainties. Plates or a frontispiece may or may not be present, even basic bibliographic data may be lacking. In many early books, the data on the books may follow the colophon and there may be no obvious title in the modern sense. Hence bibliographic details may vary between cataloguers and given the state of printing at the time as well as the vagaries

of the intervening centuries, there may be extensive variation in both the actual physical copies of books and how they are interpreted by bibliographers.

We attempted to provide a standardized format with as complete titles as practicable. In many older works the title page may list the many degrees, honorifics and society memberships of the author, editor or translator as well as the name, titles, etc. of someone to whom the book is dedicated. In most cases we have omitted or truncated this information, which is of little bibliographic value, although in some instances, particularly when important for some reason or when removal would disrupt the flow of the title, we have retained it. Publishers names are, of course, listed. However, this is by no means always a simple thing to determine. Older books may list the printers, publishers and/or booksellers associated with the book. In some cases it is easy to distinguish among these roles, but in others it is essentially impossible. Incunabula and other early books often are associated with their printers, who may or may not also be the publishers. Reference to WorldCat or other major bibliographic sources indicates that the cataloguers of these book often reach no consensus as to the role of various persons or firms mentioned. In 18th century and earlier books, many of which were published in Latin, there are some critical terms that were used in relationship to these roles. Most importantly: *apud* (at the shop of), *bibliopola* (bookseller), *ex officina* (printed by), *impensis* (at the expense of), *sumptus/sumptibus* (expense/published at the expense of) and *typographia/typographus* (printing shop/printer). Thus *impensis* and *sumptibus* typically identify the publisher, although the bookseller(s) or author themselves may often be assumed to have taken the role of publisher if these or equivalent terms do not appear. Especially in very early works, the printer may have also been the publisher and seller. We have generally left these Latin terms intact with the publishing details for completeness. A byproduct of this is that the names of publishers or others often appear in the genitive case (e.g., Salvii instead of Salvius), as dictated by Latin grammar. Likewise, for older works, we have rendered German publishers' names in a parallel fashion; thus "In der Hahn'schen Verlags-Buchhandlung" rather than "Hahn'sche Verlags-Buchhandlung" (genitive rather than nominative).

When the place of publication appears in Latin, we have provided a translation to the current city name in the language of the place itself and in English, if different, in square brackets. We have left the names of the cities in the form in which they appear in print. If in Latin, these will have most often been preceded, either explicitly or implicitly, by "in," thus the name of the city will appear in the genitive case: Roma—Romae (Rome), Holmia—Holmiae (Stockholm), etc. Titles and bibliographic data appearing in the original in languages not using the Roman alphabet are given in that original language with a translation into English, in the case of modern languages (e.g., Russian, Hebrew) or Latin (in most cases books in Ancient Greek have Latin equivalents in the extended titles). We also retained the use of medieval scribal abbreviations and Tironian notes^{xvi} when they appeared in the titles of very early books or in quoted passages.

The modern letters "J/j" and "U/u" did not exist in classical Latin and were represented by "I/i" and "V/v," respectively. "I/i" was also used for the third vowel of the modern Roman alphabet, and "V/v" was also used to represent the sound of "W/w." When "V/v"

^{xvi} Explanatory footnotes (in the translation) or bracketed comments (in the bibliography) are provided to explain these forgotten but fascinating *sigla* (abbreviations) where they appear.

was used as a "U/u" in bibliographic references, we have converted the letter to avoid confusion. However, we follow the convention of most modern Latin editions of not replacing "I/i" by "J/j" in most instances, although we do so in the case of proper names like Joseph or Johann.

We made every effort to include complete pagination, indicating the number of pages lacking printed numbers in square brackets and including the half-title and title pages, all Roman numeral pages, indices, errata and corrigenda, etc. Plates, maps, plans, portraits and frontispieces appearing on unnumbered pages are also listed, although images on numbered pages are not. In early books in particular the number of plates and their placement in the book may vary and often there is no mention or cross reference to the plates in the book so the actual number present in a complete copy may be nearly impossible to know. The numbers listed are those present or called for in the copy (copies) we examined and in some cases this was verified through detailed published bibliographic data. We indicated, when we were positive, if the maps, tables, plates were folded, but in the case of digitized versions this may not be possible to confirm and in some cases the trim size of the book, which may have been modified by previous owners/binders, may determine if a page needed to be folded or not.

Images

Historiae Amphibiorum includes only four plates (see above). However, many illustrations from a diversity of earlier works, including some unpublished manuscripts, are cited in the text and a complete understanding of Schneider's work requires reference to these images. As all of these images are, of course, long out of any copyright that might apply, we have reproduced them at the end of this volume. In the text we have used a superscript number preceded by a black dot to reference the images. Although many images are just part of a larger plate containing multiple images, we have opted to reproduce the entire plates to retain the original graphical context of the artists. The majority of our images were derived from copies available through Biodiversity Heritage Library (<https://www.biodiversitylibrary.org/>), using the high-resolution download feature of this site. Other images are reproduced with the permission of the libraries that hold the works (see p. 502) or come from personal library copies.

Many of the images are derived from just a few critical early works that were heavily cited by Schneider. These include the works of Seba, La Cépède, Laurenti, Russell, and others. Schneider also cited the unpublished manuscript of Charles Plumier that he had accessed in the library of M.E. Bloch and the unpublished illustrations of snakes (and limbless lizards) from the Linck collection in Leipzig. Although Plumier's manuscript has been lost, what is probably a draft version of the illustrations for it survives in the collection of the Muséum National d'Histoire Naturelle in Paris, and we have here reproduced the comparable illustrations from the Paris Museum version. The Linck images, the source for 24 plates in Scheuchzer's (1735) *Physica Sacra*, are extant in the Universitätsbibliothek Leipzig. These have already been reproduced once (Engelmann and Obst 2014), but for completeness, we here provide those cited specifically by Schneider. In addition to the 264 plates noted by Schneider, we also cite 11 others in our footnotes (for example, later images of Schneider's types from the works of Gravenhorst). These are noted by a number preceded by a black dot and the letters "FN."