## A Pocket Guide to Salamanders of Pennsylvania

By Walter E. Meshaka, Jr., and Joseph T. Collins. 2012. The Pennsylvania Heritage Foundation, 225 State Street, Suite 302, Harrisburg, Pennsylvania 17101 USA. 52 pages, 4.71 USD.

This booklet is a companion to A Pocket Guide to Lizards and Turtles of Pennsylvania published the same year (reviewed in *The Canadian Field-Naturalist* 126(4): 345-346). It is an identical 15.2 by 9.5 in height and width and only marginally thicker with 12 more pages. The authors are also identical in the two guides but this one is dedicated to Collins, "Whose passion for herpetology was equaled only by his love for sharing it", who had died of a heart attack at 72 before it was printed. The sponsors are the same: The State Museum of Pennsylvania, Pennsylvania Historical & Museum Commission; Wild Resource Conservation Program, Pennsylvania Department of Conservation & Natural Resources; Dickinson College Biology Department; Forgotten Friend Reptile Sanctuary; Friends of Wildwood Lake Nature Center, Inc.; Liberty Environmental, Inc.; Powdermill Nature Reserve; Shippensburg University; and The Center for North American Herpetology.

Like the earlier guide to lizards and turtles, this guide opens with an introduction. This one points out the protected species in the state, officially two endangered, and one threatened. Mentioned as well is the concern expressed by some conservationists over four additional ones. Following this are acknowledgements.

Accounts for the 23 salamander species recorded in Pennsylvania occupy two facing pages for each. On the left are presented the English name, scientific name, total length, and brief highlights on range (in Pennsylvania), habitat, habits, breeding, diet, and conservation considerations. On the right are two illustrations of transformed individuals. For the Eastern Newt both mature adult and immature terrestrial eft stages are depicted. Also on the illustration page is a minute range map with counties in which the species is present in green based on information from the *Pennsylvania Herpetological Atlas* web site and *Amphibians and Reptiles of Pennsylvania and the northeast* by Arthur C. Hulse. C. J. McCoy and Ellen J. Censky. The distributions vary from covering the whole state to barely entering it.

The guide concludes with one photograph of a Spotted Salamander egg mass, another of spermatophores of the same species, and two contrasting the pond larva

of the Spotted Salamander with the stream larva of the Spring Salamander, and a checklist of species in the five families represented. A page gives sources of further information on herpetology on websites and publications relevant to Pennsylvania and comments on herpetoculture which stresses current state regulations. The inside back cover has information on the authors and a quote from *At the Planning Commission* by Barbara Meyn in *The Abalone Heart*, 1988: "I forgot to tell them about the salamanders, dark as chocolate, torpid with cold, they move ... about this time every year, how easy it is to drive right over them if you are unaware."

Overall, this publication is less than successful for species identification partly due to the darkness of many photographs but primarily because colour and pattern alone are not sufficient to distinguish between some similar forms. Examples are Jeffersonian and Bluespotted salamanders, and the many dark or red woodland or stream assemblages in Plethodontidae. It should, however, reliably serve for distinguishing the other three Ambystomatidae ([Yellow-] Spotted Salamander, and Marbled [not recorded in Canada] and Tiger [recorded only once in eastern Canada] salamanders), and the single Protidae (Mudpuppy), Salamandridae (Eastern Newt) and Cryptobranchidae (Hellbender) [the latter not occurring in Canada]. Fortunately for use in eastern Canada, 10 of the 15 Pletodontidae do not range this far north. The particularly confusing pairs that do occur in Canada are the plethodontid Northern and Allegany dusky salamanders and the ambystomatid Jeffersonian and Blue-spotted salamanders. A potential source of confusion for Canadian users is that the Red-backed Salamander is represented in the pocket guide only by the red-back phase (red dorsum and gray sides) whereas lead-back (lacking red) and erythristic (all red) phases which might be confused with a southern species, as well as well as other colour variants, occur in Canada with the lead-back reaching 100% in some populations.

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