

APPENDIX S1

Plethodontid and rhyacotritonid species in which partial or complete courtships have been observed. See Table 1 for abbreviations.

| Species                           | Behavioral delivery of<br>mental gland pheromones | Video links            | Courtship<br>illustrations | References                                 |
|-----------------------------------|---|------------------------|----------------------------|--|
| <i>Rhyacotriton variegatus</i>    | none  | <a href="#">AP-POS</a> | drawing                    | Doten et al. pers. comm.                   |
| <i>Pseudotriton ruber</i>         | none  | <a href="#">TSW</a>    | drawing, photos            | Organ and Organ 1968; Arnold<br>1972, 1977 |
| <i>Gyrinophilus porphyriticus</i> | none  |                        |                            | Beachy 1997                                |
| <i>E. bislineata</i>              | swing, pull, snap                                 |                        | drawing                    | Noble 1929, Arnold 1972                    |
| <i>E. cirrigera</i>               | swing, pull, snap                                 |                        |                            | Kozak 2003                                 |
| <i>E. lucifuga</i>                | swing   |                        | drawing                    | Organ 1968                                 |
| <i>E. neotenes</i>                | unknown   |                        | drawing                    | Bogart 1967                                |
| <i>E. rathbuni</i>                | unknown   |                        |                            | Bechler 1988                               |
| <i>E. sosorum</i>                 | unknown   | <a href="#">TSW</a>    |                            |  |
| <i>E. wilderae</i>                | pull, snap  | <a href="#">HC</a>     |                            | Arnold 1972, Kozak 2003                    |
| <i>Hemidactylium scutatum</i>     | unknown   |                        |                            | Branin 1935                                |
| <i>Bolitoglossa flavimembris</i>  | slide, snap                                       |                        |                            | Arnold 1972                                |
| <i>B. occidentalis</i>            | pull, snap  |                        | <a href="#">drawing</a>    | Arnold unpub. observations                 |
| <i>B. resplendens</i>             | pull, snap  |                        | <a href="#">drawing</a>    | Arnold unpub. observations                 |
| <i>B. subpalmata</i>              | slide, pull, snap                                 |                        |                            | Arnold 1972                                |
| <i>Pseudoeurycea belli</i>        | pull, snap  |                        |                            | Salthe and Salthe 1964                     |
| <i>Dendrotriton bromeliacius</i>  | swing, pull, snap                                 |                        | <a href="#">drawing</a>    | Arnold unpub. observations                 |
| <i>Batrachoseps attenuatus</i>    | pull, snap  | <a href="#">AP-HC</a>  |                            | Arnold unpub. observations                 |
| <i>Batrachoseps major</i>         | pull, snap  | <a href="#">AP-POS</a> |                            | Arnold unpub. observations                 |
| <i>Plethodon vandykei</i>         | slide   |                        | drawing                    | Lynch and Wallace 1987                     |
| <i>P. vehiculum</i>               | unknown   |                        |                            | Jones et al. 2001                          |

|                               |                          |  |                                     |   |
|-------------------------------|--------------------------|--|-------------------------------------|---|
| <i>P. caddoensis</i>          | slide, swing             |  |                                     | Arnold 1972   |
| <i>P. cylindrawingaceus</i>   | slide, slap              |  |                                     | Organ 1960a; Arnold 1972  |
| <i>P. montanus</i>            | slide, slap              | <a href="#">AP-POS</a>   | drawing                             | Organ 1958, Arnold 1976   |
| <i>P. kentucki</i>            | slide, slap              |  | drawing                             | Marvin and Hutchison 1996                                       |
| <i>P. ouachitae</i>           | slide, swing, slap       |  |                                     | Arnold 1972   |
| <i>P. melaventris</i>         | slide, swing             | <a href="#">TSW-AP</a>   |                                     | Arnold 1972   |
| <i>P. shermani</i>            | slide, slap              | <a href="#">HC, SD, SD-<br/>POS, AP, AP-<br/>POS, TSW-<br/>POS, TSW-<br/>POS</a> | drawing, photos                     | Arnold 1976, 1977; Houck and<br>Arnold 2003                     |
| <i>P. yonahlossee</i>         | slide, slap              | <a href="#">AP-POS</a>   | <a href="#">drawing</a> , photos    | Arnold 1972; Pierson et al. 2017                                |
| <i>P. angusticlavius</i>      | slide, slap              |  |                                     | Dyal 2006   |
| <i>P. dorsalis</i>            | slide, pull, snap, slap  |  |                                     | Picard 2005   |
| <i>P. cinereus</i>            | slide, swing, pull, snap | <a href="#">AP-POS</a>   |                                     | Arnold 1972; Gergits and Jaeger<br>1990; Dyal 2006              |
| <i>P. richmondi</i>           | slide, swing, pull, snap |  |                                     | Arnold 1972; Dyal 2006  |
| <i>P. welleri</i>             | slide, swing             |  | drawing                             | Organ 1960a; Arnold 1972  |
| <i>Ensatina eschscholtzii</i> | none                     | <a href="#">AP-POS</a>   | drawing,<br><a href="#">drawing</a> | Stebbins 1949; Arnold 1972                                      |
| <i>Hydromantes genei</i>      | swing                    |  | drawing                             | Mertens 1923; Noble and Brady<br>1930; Noble 1931; Rehberg 1960 |
| <i>H. italicus</i>            | unknown                  |  |                                     | Durand 1970   |
| <i>Aneides aeneus</i>         | pull, rub, press         |  |                                     | Cupp 1971   |
| <i>A. lugubris</i>            | pull, rub, press         |  | drawing,<br><a href="#">drawing</a> | Arnold 1972; Kiemnec-Tyburczy<br>and Sapp 2017                  |
| <i>A. ferreus</i>             | pull, rub, press         | <a href="#">TSW, AP-POS,<br/>AP-HC</a>   |                                     | Sapp and Kiemnec-Tyburczy 2011                                  |

|                             |                  |  |         |  |
|-----------------------------|------------------|--|---------|--|
| <i>A. flavipunctatus</i>    | pull, rub, press | <a href="#">POS-SD</a> , <a href="#">TSW</a> ,<br><a href="#">HC</a> |         | Kiemnec-Tyburczy and Sapp 2017                         |
| <i>Desmognathus organi</i>  | bite-seize, tug  |  | photos  | Organ 1961; Houck 1980; Verrell<br>1999b; this article |
| <i>D. aeneus</i>            | bite-seize, tug  |  | photos  | Promislow 1987   |
| <i>D. apalachicola</i>      | pull, snap       |  |         | Verrell 1994a  |
| <i>D. auriculatus</i>       | pull, snap       |  |         | Verrell 1997a  |
| <i>D. brimleyorum</i>       | pull, snap       |  |         | Verrell 1997b  |
| <i>D. carolinensis</i>      | pull, snap       |  |         | Herring and Verrell 1996                               |
| <i>D. conanti</i>           | snap             |  | drawing | Verrell 1995   |
| <i>D. fuscus</i> (southern) | pull, snap       |  |         | Uzendoski and Verrell 1993                             |
| <i>D. imitator</i>          | tpd (snap)       |  |         | Verrell 1994b  |
| <i>D. monticola</i>         | pull, snap       |  |         | Brock and Verrell 1994                                 |
| <i>D. ochrophaeus</i>       | pull, snap       |  |         | Herring and Verrell 1996                               |
| <i>D. ocoee</i>             | pull, snap       | <a href="#">HC</a>   | photos  | Herring and Verrell 1996; Mead<br>and Verrell 2002     |
| <i>D. orestes</i>           | pull, snap       |  |         | Herring and Verrell 1996                               |
| <i>D. quadramaculatus</i>   | pull, snap       |  |         | Verrell 1999b  |
| <i>D. santeetlah</i>        | snap             |  |         | Maksymovitch and Verrell 1992                          |
| <i>D. welteri</i>           | pull, snap       |  |         | Mabry and Verrell 2003                                 |

---

