

# 6 | Key to Nymphs of North American Families of Plecoptera

This family key has been modified from several sources, including Ricker (1959b), Jewett (1968), McCafferty (1981), and Harper & Stewart (1984). A few new secondary characters are introduced in the family key, but this key differs from earlier ones primarily in organization. Throughout the family key and the generic keys that follow, we have stated the most easily observed diagnostic character first. All keys are based on late-instar nymphs, but, hopefully, the utilization of secondary characters will permit determination of younger individuals.

## KEY TO FAMILIES

1. Highly branched gills present on sides and venter of all thoracic segments (Fig. 5.15, 5.3)..... 2  
 Gills absent, or restricted to cervical or coxal area (Fig. 14.2E, 10.12D) or fingerlike without numerous filaments (Fig. 12.2C, 14.36F) ..... 3
2. Gill tufts present on abdominal sterna 1–2 or 1–3 (Fig. 15.2C,D) ..... Pteronarcyidae, p. 421  
 Gill tufts absent from abdominal sterna 2–3 (Fig. 5.2, 5.3)..... Perlidae, p. 278
3. Coxae with single, telescoping gills (Fig. 10.12D), or abdomen with large triangular ventroapical plate (Fig. 10.2G,H); first and second tarsal segments subequal in length (Fig. 10.2C). ..... Taeniopterygidae, p. 197  
 Coxal gills and ventroapical abdominal plates absent; second tarsal segment wedgeshaped and shorter than segment 1 (Fig. 7.2D)..... 4
4. Thoracic sternal plates shieldlike, overlapping succeeding segment and typically fringed with posterior setal row (Fig. 12.2F); habitus roach-like (Fig. 12.1) ..... Peltoperlidae, p. 259  
 Thoracic sterna not shieldlike or overlapping, and without posterior setal row (Fig. 5.2); habitus not roachlike (Fig. 7.1, 14.1) ..... 5
5. Apex of labial palps extending little beyond anterior para-glossa margin; paraglossa and glossa extending forward about the same distance (Fig. 5.4F)..... 6  
 Entire apical segment of labial palp extending beyond anterior margin of paraglossa, paraglossa much longer than glossa (Fig. 5.5E) ..... 8
6. Metathoracic wingpads strongly diverging from body axis (Fig. 9.1); cervical gills sometimes present (Fig. 9.2E, 9.24D); body form short and