7 Summary and Conclusions

As recently as 1960, Scudder gave 90 as the number of Holarctic Heteroptera (adventive species included) present in Canada and the United States. That nearly 100 species now are known in a single family, Miridae, demonstrates an inadequate knowledge of the North American fauna. Increased attention to mirid systematics and ecology, rather than a recent influx of introductions, is primarily responsible for the greater numbers of adventive species recorded from North America. For example, our collecting on ornamental conifers in Pennsylvania resulted in the detection of four species new to the North American fauna.

Although other zoogeographic interpretations are possible, available evidence suggests that 61 of the 98 species are adventive (Lists 2-5) and 37 are indigenous (List 1). About 3.2% (61 of 1,930 species) of the mirid fauna is not native to Canada or the United States. Many of the immigrants were detected in the Canadian Maritime Provinces or in or near seaports of the Northeast. Several species are concentrated around ports of entry in the Pacific Northwest: southwestern British Columbia, including Vancouver Island, and northwestern Washington.

Figure 31 shows the detection of adventive Miridae by decade. None of the 61 species was reported before 1870. Two detection peaks are evident: one in the 1920s (15 species) and another during the 1970s