Bog

A wetland dominated by *Sphagnum* moss, sedges, ericaceous shrubs, or evergreen trees rooted in deep peat with a pH less than 5. Examples would include the blanket bogs which carpet mountainsides in northern Europe, and the vast peatland of the West Siberian Lowland in central Russia (Figure 1.5).

Fen

A wetland that is usually dominated by sedges and grasses rooted in shallow peat, often with considerable groundwater movement, and with pH greater than 6. Many occur on calcareous rocks, and most have brown mosses, in genera including *Scorpidium* or *Drepanocladus*. Examples can be found within the extensive peatlands of northern Canada and Russia, as well as in smaller seepage areas throughout the temperate zone (Figure 1.6).

Other wetland types could be added to these four. Two important ones are the following.

Wet meadow

A wetland dominated by herbaceous plants rooted in occasionally flooded soils. Temporary flooding excludes terrestrial plants and swamp plants, but drier growing seasons then produce plant communities typical of moist soils. Examples would include wet prairies along river floodplains, or herbaceous meadows on the shorelines of large lakes. These wetlands are produced by periodic flooding and may be overlooked if visited during a dry period (Figure 1.7).

Shallow water

A wetland community dominated by truly aquatic plants growing in and covered by at least 25 cm of water. Examples include the littoral zones of lakes, bays in rivers, and the more permanently flooded areas of prairie potholes (Figure 1.8).

Any attempt to sort the diversity of nature into only six categories will have its limitations. The Everglades, for example, have a peat substrate, moving water, and many reeds. So is it a fen or a marsh or wet prairie, a mixture of several of these, or something completely unique? Rather than worry further about this, we should probably admit that wetlands show great variation, and agree to not get stalled or diverted by debates over terminology. As Cowardin and Golet (1995) observe "no single system can accurately portray the diversity of wetland conditions world-wide. Some important ecological information inevitably will be lost through classification."
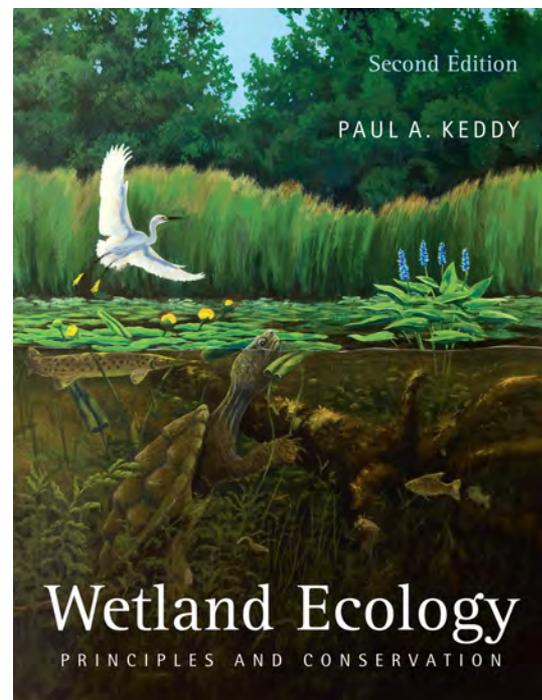
Keddy, P. A. 2010. Wetland Ecology: Principles and Conservation (2nd edition). Cambridge University Press, Cambridge, U.K. pp. 8-9.

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FIGURE 1.5 Bogs. (*a*) Lowland continental bog (Algonquin Park, Canada). (*b*) Upland coastal bog (Cape Breton Island, Canada).