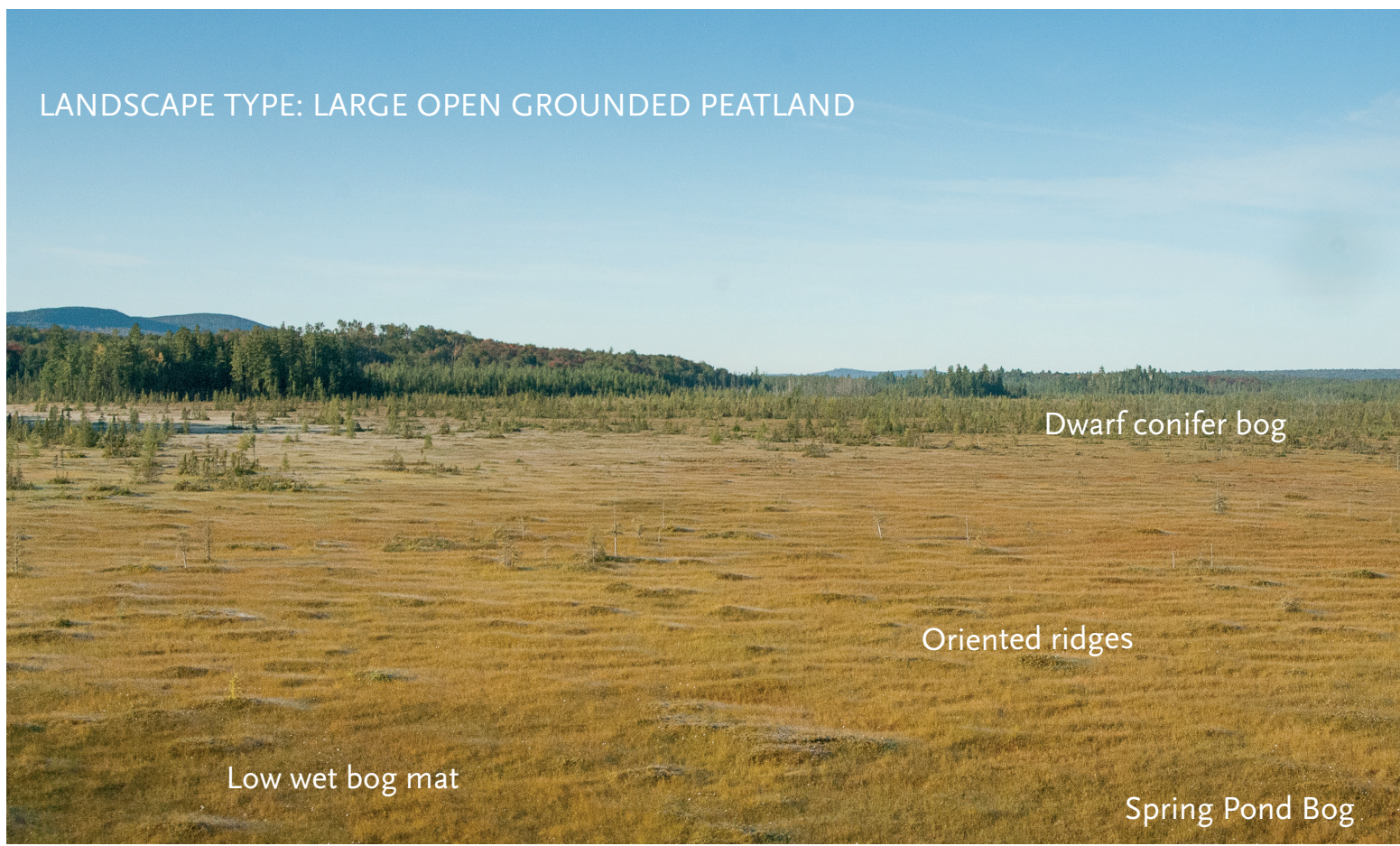
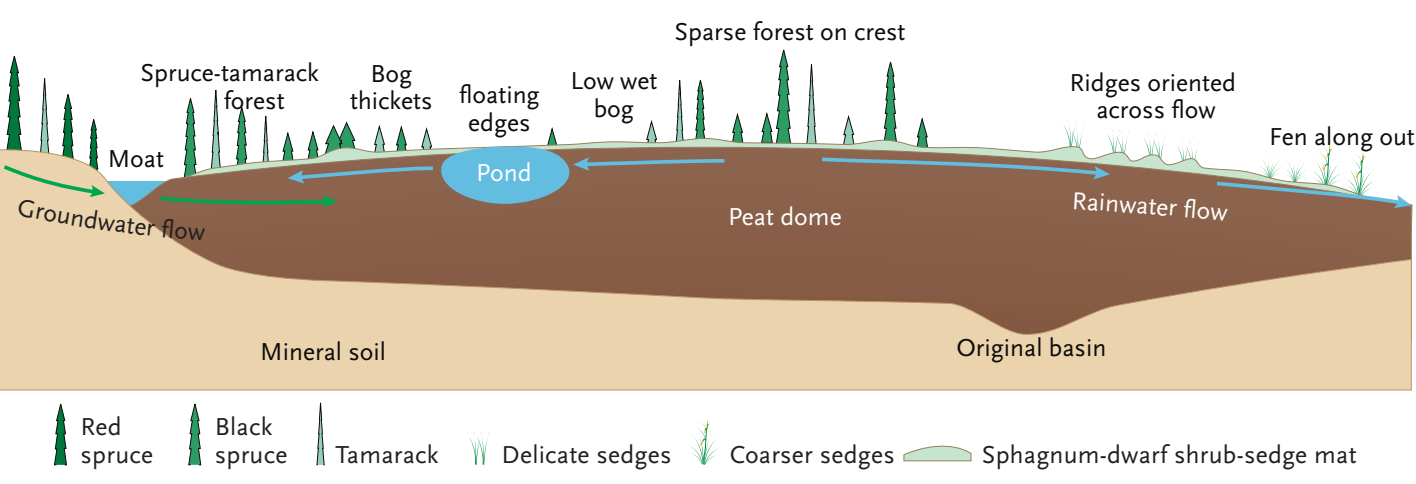


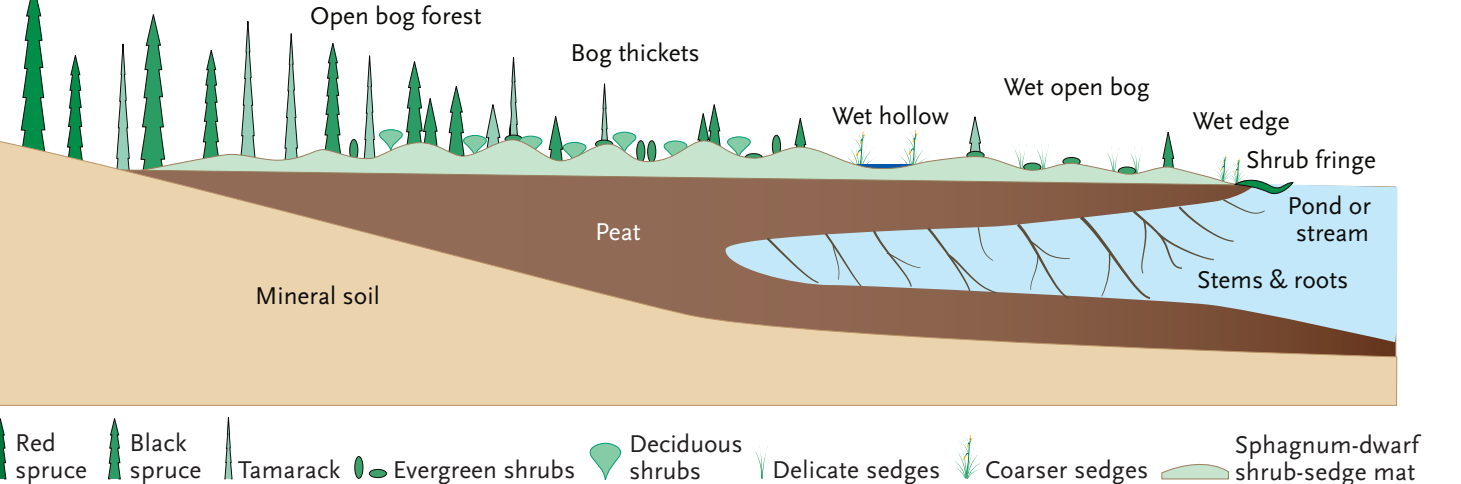
Large lenses of peat, often convex and forming drainage divides, commonly on flat glacial terraces or outwash plains. Covered, and dominated, by a continuous layer of sphagnum moss, plus sedges, dwarf evergreen shrubs, and scattered black spruce or tamarack. Often grading into conifer thickets or forests. Characteristically cold, wet, organic, acid, and nutrient poor.

Major processes: peat accumulation and decay; nutrient sequestration, thermal insulation, blocking of groundwater by peat; acid production and burial of vascular plants by sphagnum; surface flow patterns; formation of hummocks, ponds, ridges, and hollows.



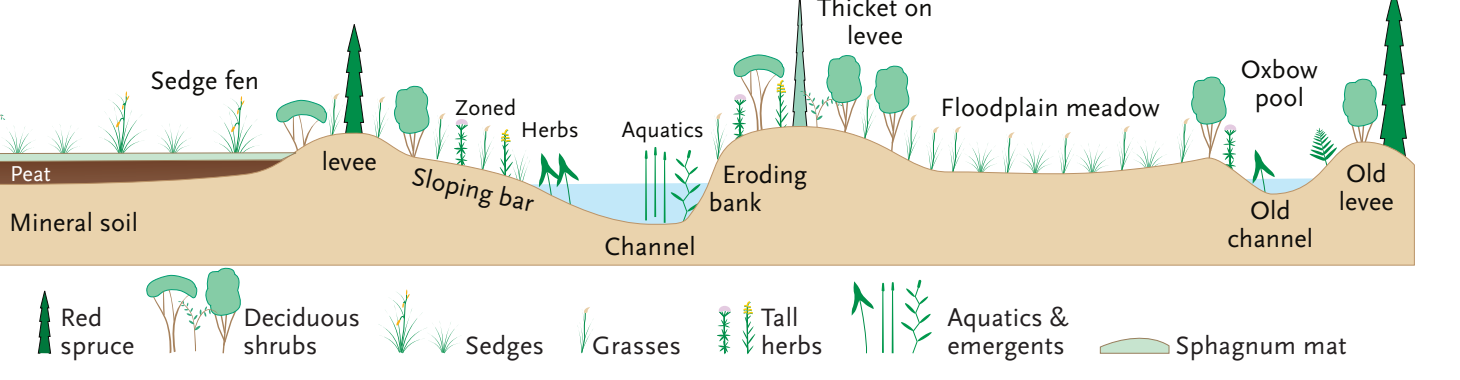
A peat mat extending from the shoreline of a lake or stream out over the water, either floating or supported by woody debris. Often with pools or channels connecting to the lake, or when lake levels vary, dissected into islands or converted to a sedge fen. Covered by a continuous layer of sphagnum moss, plus sedges, dwarf evergreen shrubs, and scattered black spruce or tamarack, with marsh plants and aquatic vegetation in the pools. Often found in the lake-side of a shoreline. Characteristically acid and nutrient poor in the hummocks but richer in the pools and at the shoreward edge.

Major processes: peat accumulation and decay; mat expansion; nutrient sequestration, acid production and burial of vascular plants by sphagnum; adjustment to water-level changes; formation of hummocks, ponds, and channels; re-roofing after flooding.



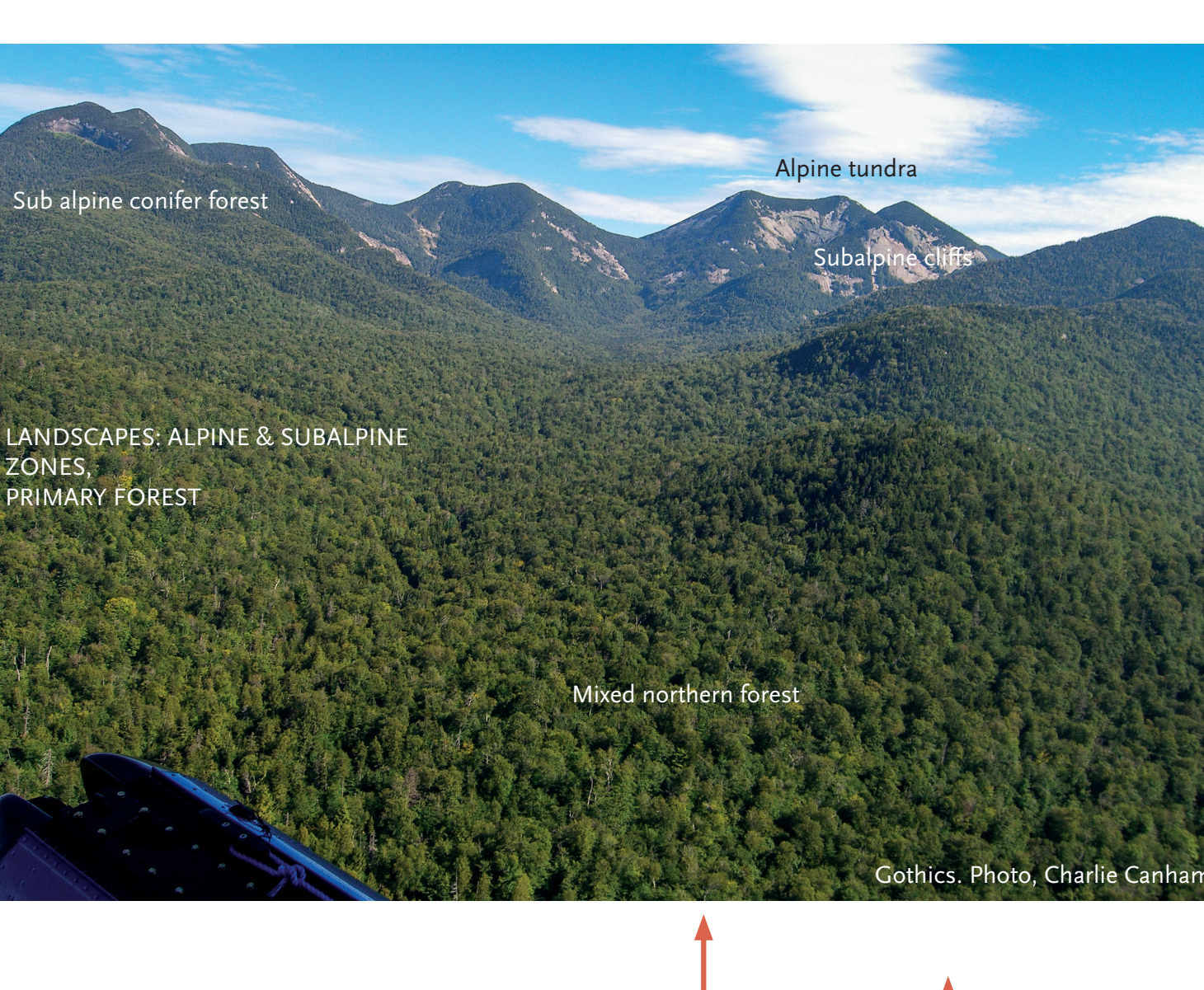
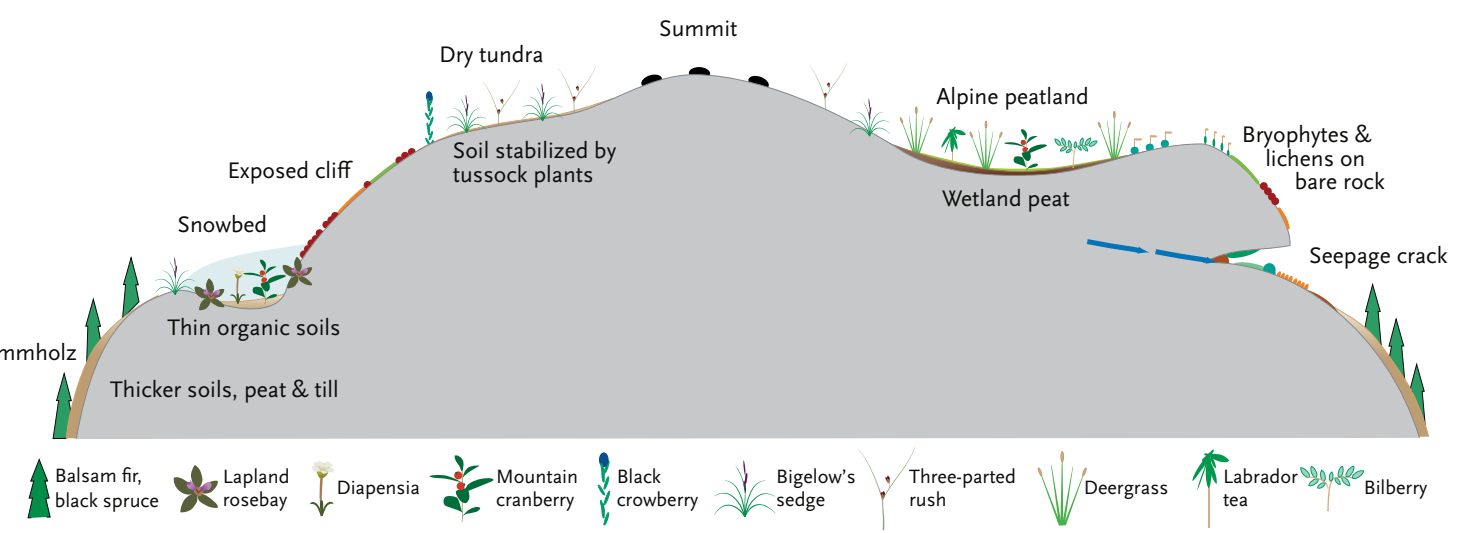
An nonforested river corridor, often of a low-gradient, underfitted, high-sinuosity stream near its headwaters, often on glacial sands and gravels in a former lake basin. Common dominants are alder and tall herbs on the higher parts of the floodplain, sedges and blue-joint grass in the lower portions, and sedges, low herbs, and aquatics on channel bars. Characteristically summer-wet, a medium-fertility environment with mineral soils and moderately diverse herb and shrub communities.

Major processes: seasonal flooding, sedimentation, water retention, channel migration, levee, oxbow, and bar formation, beaver flooding, tussock formation, vegetative competition, peat accumulation at the margins of the corridor.



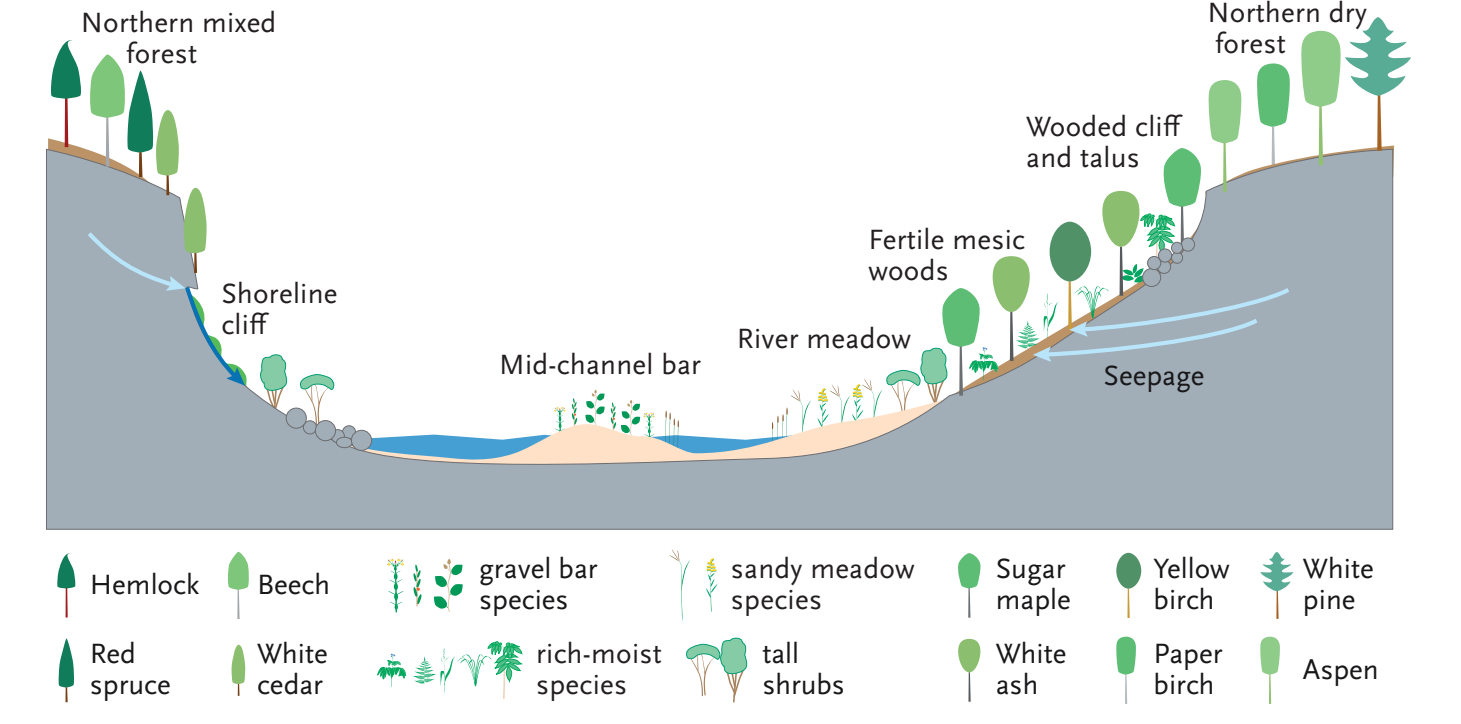
The high mountains, mostly above 3,500 feet, where short growing seasons and winter cold and wind limit plant growth. Commonly with stunted spruce and fir grading into open rock or alpine tundra, often with cliff and slides. Characteristically cold and stressful, with low, evergreen, mat-forming and tussock forming plants. Winter damage from ice, cold, and wind, and summer stress from intense sun are both common. Water supplies are limited and seepage and snowbeds are important.

Major processes: frost action, wind abrasion, intense insolation, desiccation, growth limitation, nutrient retention, vegetative persistence.



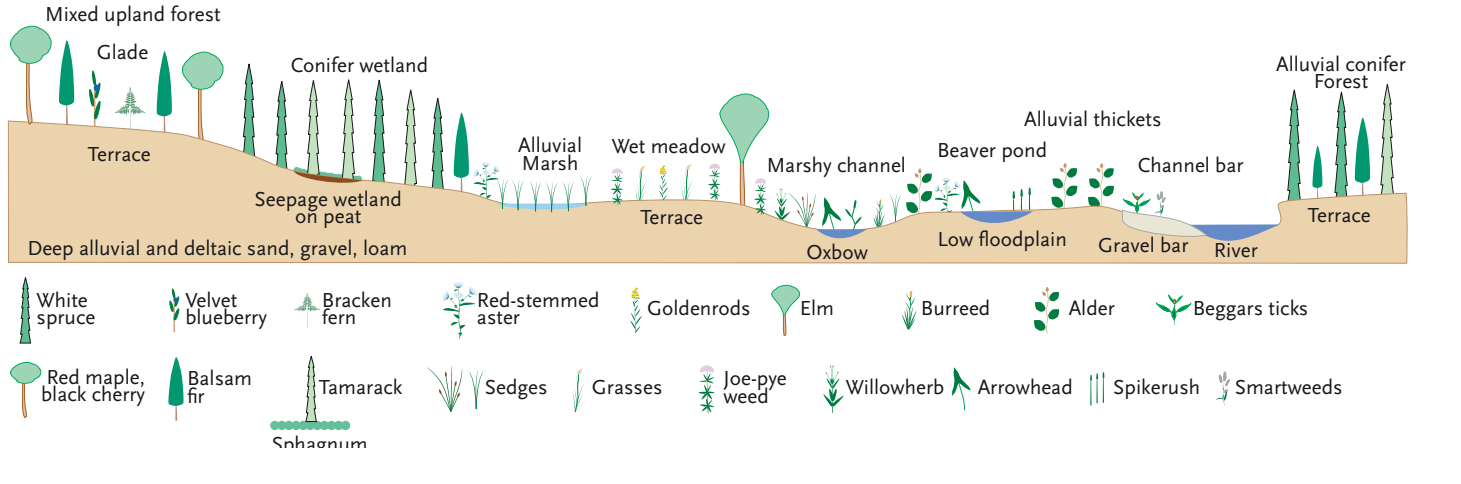
Typical of streams and rivers in relatively steep valleys. Associated with stable channels, low sinuosity, moderate to high slope and energy, limited alluvium. Typically a wooded corridor, often with outcrops or seepage near the streams, narrow alluvial bands, and cobble bars and islands.

Major processes: seepage, rockfall, soil creep, frazil ice formation, scouring by water and ice, ice accumulation on bars and islands at energy transitions. May have exceptional diversity when calcareous seepage is present.



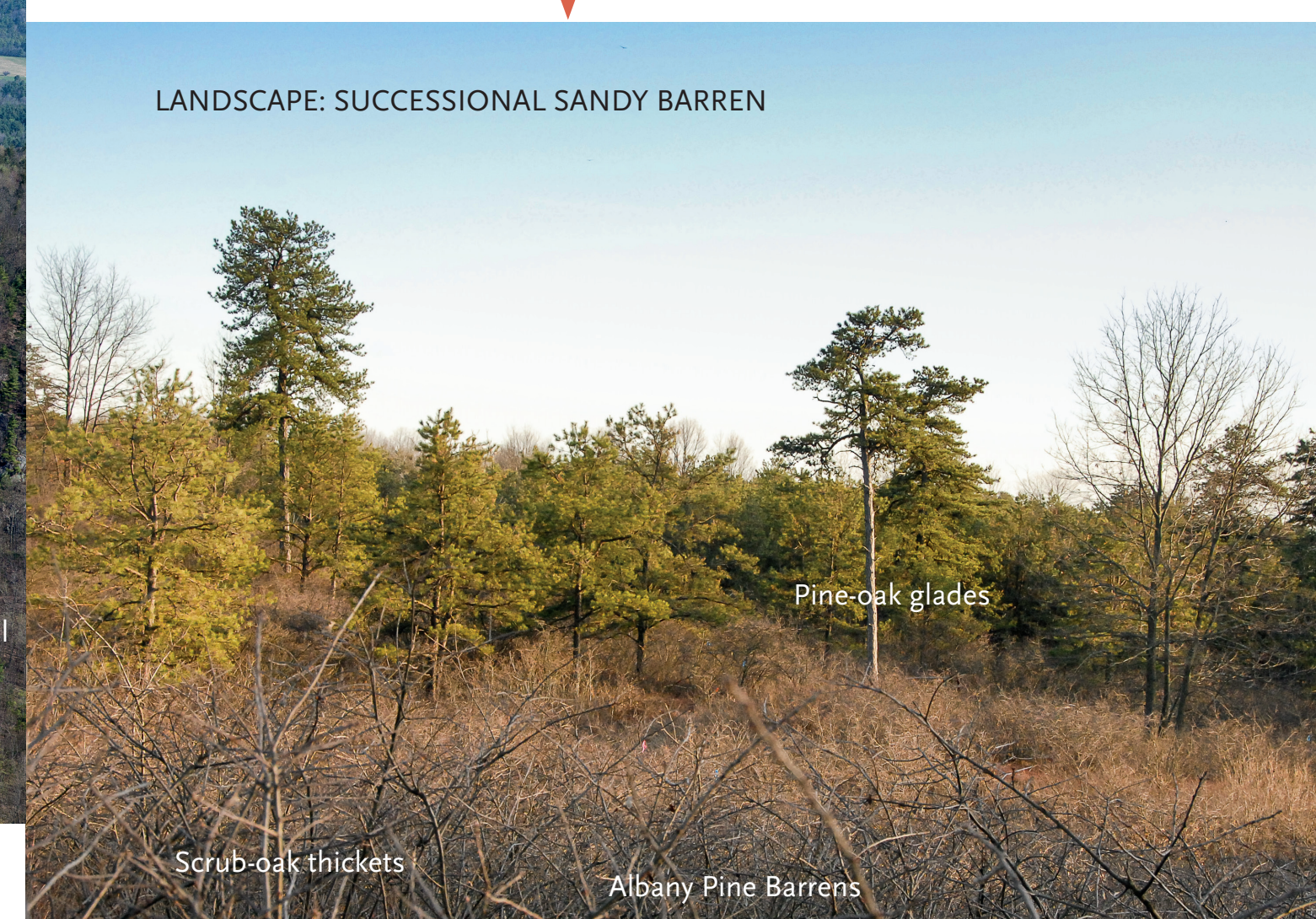
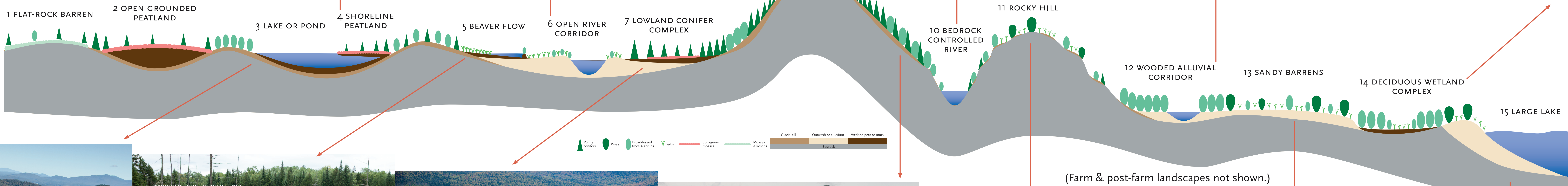
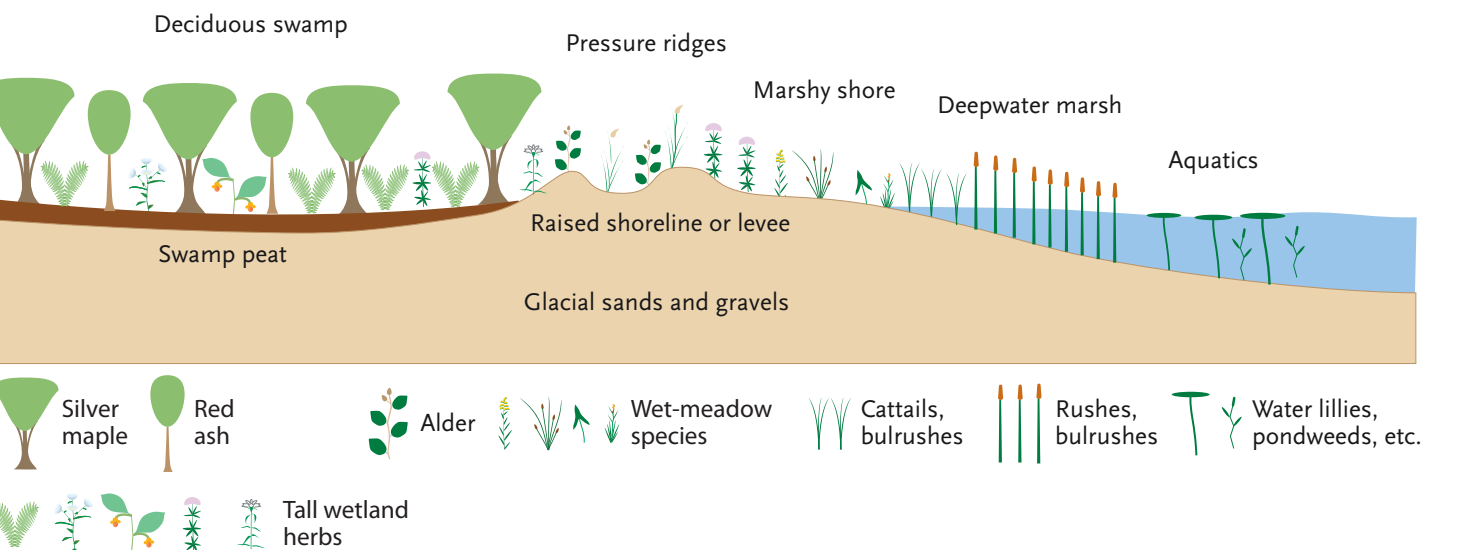
An alluvial river corridor or partly vegetated by deciduous or, as shown here, conifer forests. Formerly common on alluvial terraces of major rivers, now largely cleared for agriculture. Typically mixing floodplain forests on the higher terraces with alluvial thickets, marshes, and oxbow ponds on the lower floodplain. Characteristically fertile and moist, with deep soils. Deciduous forests often have extensive groundlayer of tall herbs, coniferous ones more open understoreys with mosses and low herbs.

Major processes: flooding, sediment deposition, channel migration, cutting and abandonment of bends, bank erosion, bar formation, damage by floods and ice, persistent wetness in depressions and on low floodplain, limited establishment of woody plants, shading and competition.

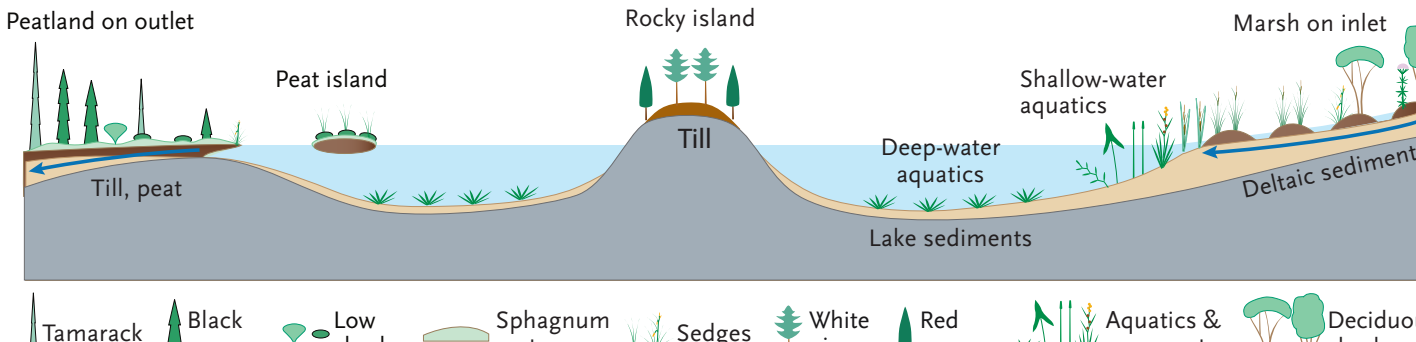


Deciduous swamp forests low or moderate elevations, either in basins in a floodplain, or adjacent to a stream or lake and then often separated from it by a levee, berm, or, as here, a pressure ridge formed by winter ice. Typically underlain by peat, of moderate fertility, and wet for much of the growing season. Canopy trees (silver maple, red ash, black ash, formerly elm, cottonwood) tolerant of flooding. *Salix nigra* and *S. pyramidalis* form dense thickets of tall herb. Logs, snags, and hummocks, often with dense bryophyte mats, common. Often associated with deep and shallow marshes, and fertile bays with dense aquatic beds.

Major processes: peat accumulation, water retention, groundwater flow, generation of snags and woody debris, seasonal flooding, mound formation, shading, competition.

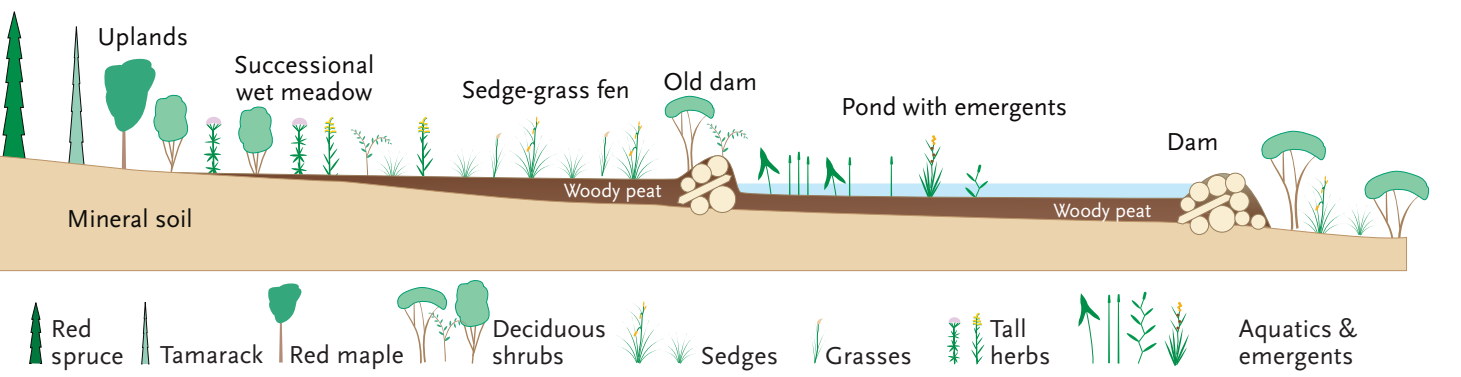


Major processes: Inputs of nutrients, acids, bases, and organic carbon; natural and artificial changes in level; stratification and overturn; deposition of sediment; formation of deltas, peatlands, marshes, and swamps.



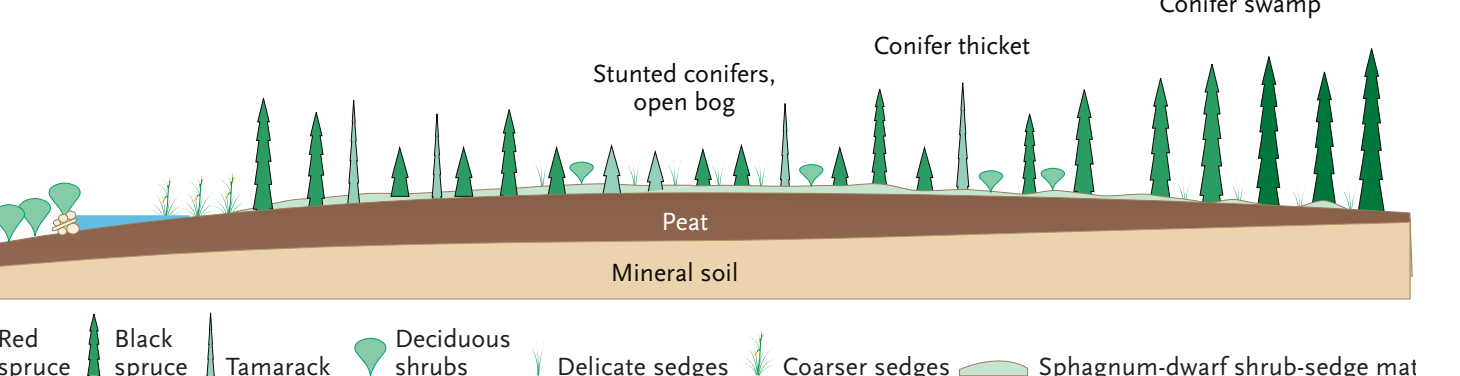
Open ponds, grassy meadows, and shrubby or thicketed on lands currently or formerly flooded by beaver. Often in chains in drainages and contain a mosaic of different successional stages. Often in wetlands or along rivers, but sometimes in openings in forests. Characteristically wet and at least moderately fertile; often densely vegetated.

Major processes: flooding and drainage; sedimentation; nutrient import by beavers; formation of snags, hummocks, fallen woody debris; successional competition between woody plants and herbs; persistence of aquatic and marsh plants in remnant pools and channels.



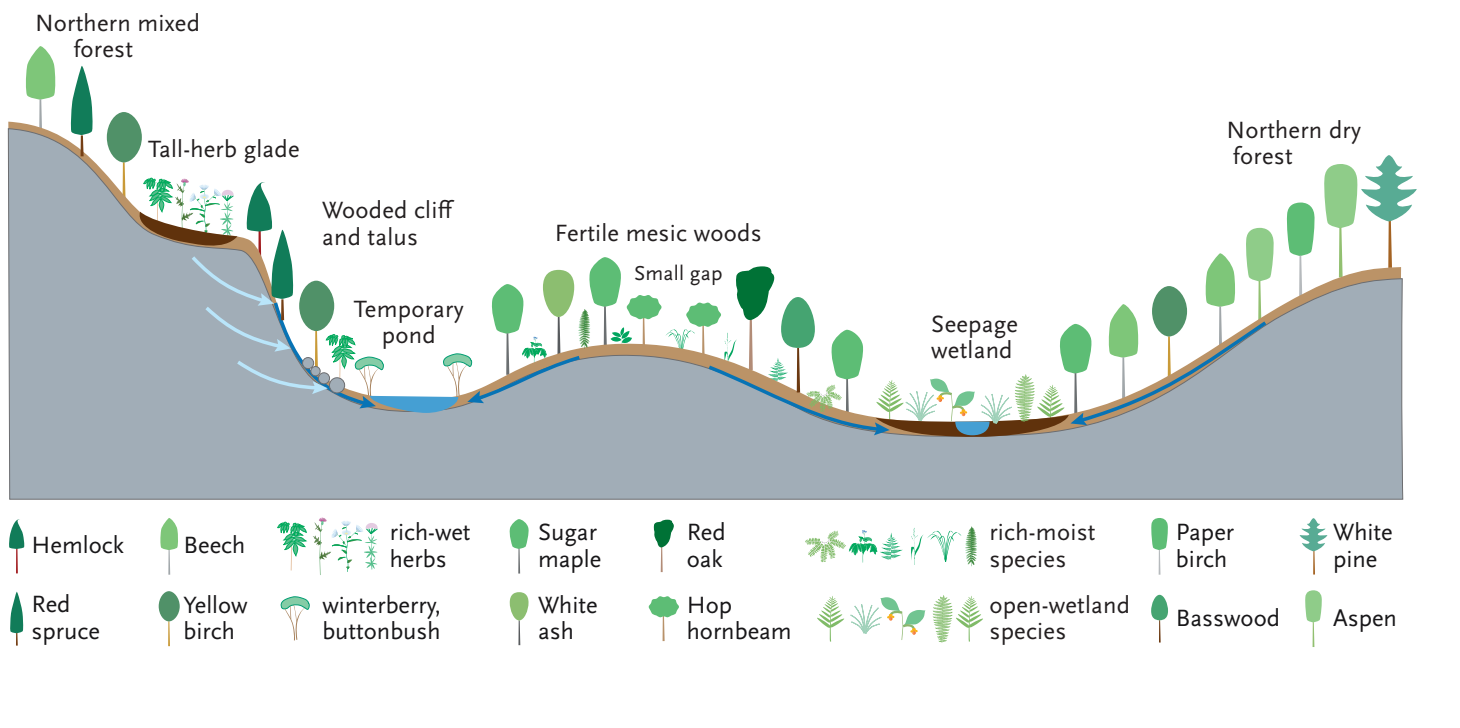
Conifer-dominated peatlands in basins or river valleys, often on outwash or alluvium. Common grading from spruce-fir forests at the upland edge to stunted conifer bog in the interior and black spruce-tamarack swamp along a river channel or open peatland. Often opening into small raised bogs. Characteristically wet, cold, moderately to weakly minerotrophic, dark, largely evergreen and acid.

Major processes: peat accumulation, water retention, groundwater flow, shading, nutrient sequestration by sphagnum, generation of snags and woody debris.



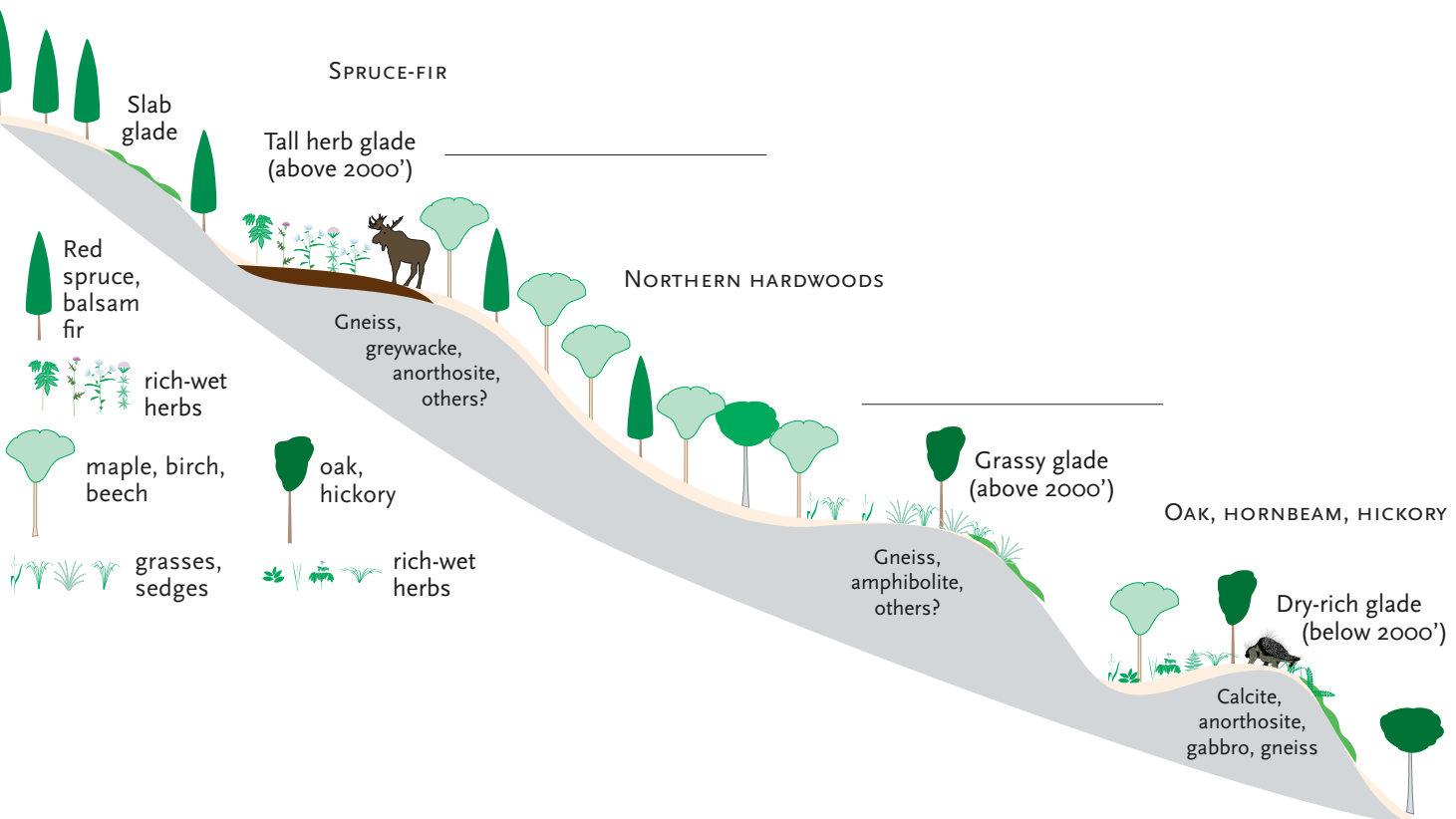
The matrix upland forests of the Adirondacks at middle elevations: deciduous, coniferous, or mixed, harvested or unharvested, but not previously cleared for agriculture. Typically acid and low in diversity on gneisses and granites; more fertile and diverse on anorthosite, gabbro, and metasediments; and reaching their highest diversity in fertile coves and stream bottoms with deep soils and groundwater seepage.

Major processes: soil creep, seepage and ponding, generation of peat and woody debris, shading, competition and neighborhood dynamics.



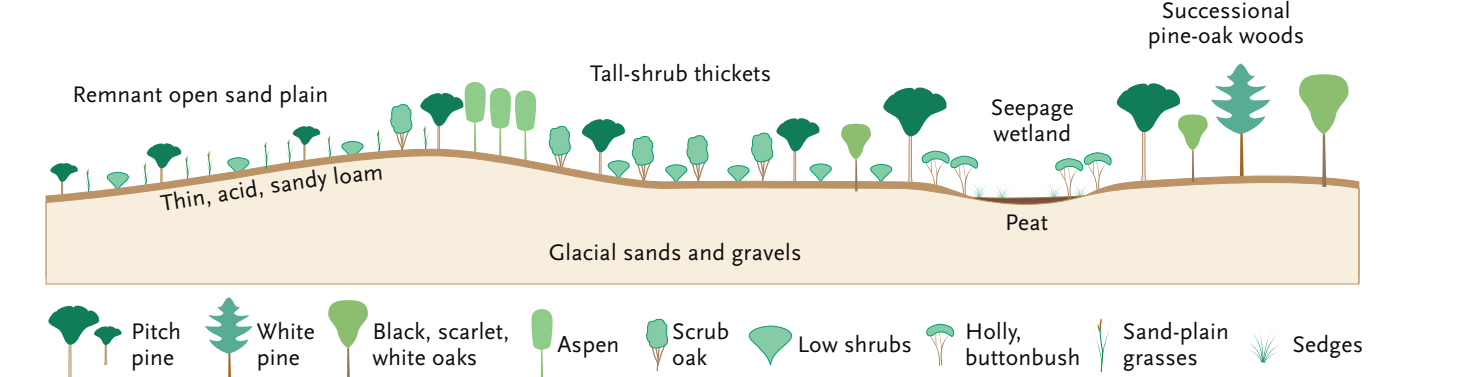
hills with large areas of ledge and/or cliff, typically glacially plucked or steepened and only small amounts of surface flow above the ledges. Various wet or dry and acid or fertile, with low open forests, rocky glades, and exposed cliffs. When dry and fertile, often with oak-hickory-hornbeam forests and high diversity herb-graminoid glades.

Major processes: glacial plucking, fire, surface flow and seepage, summer drought, frost action in thin soils, possibly herbivory.



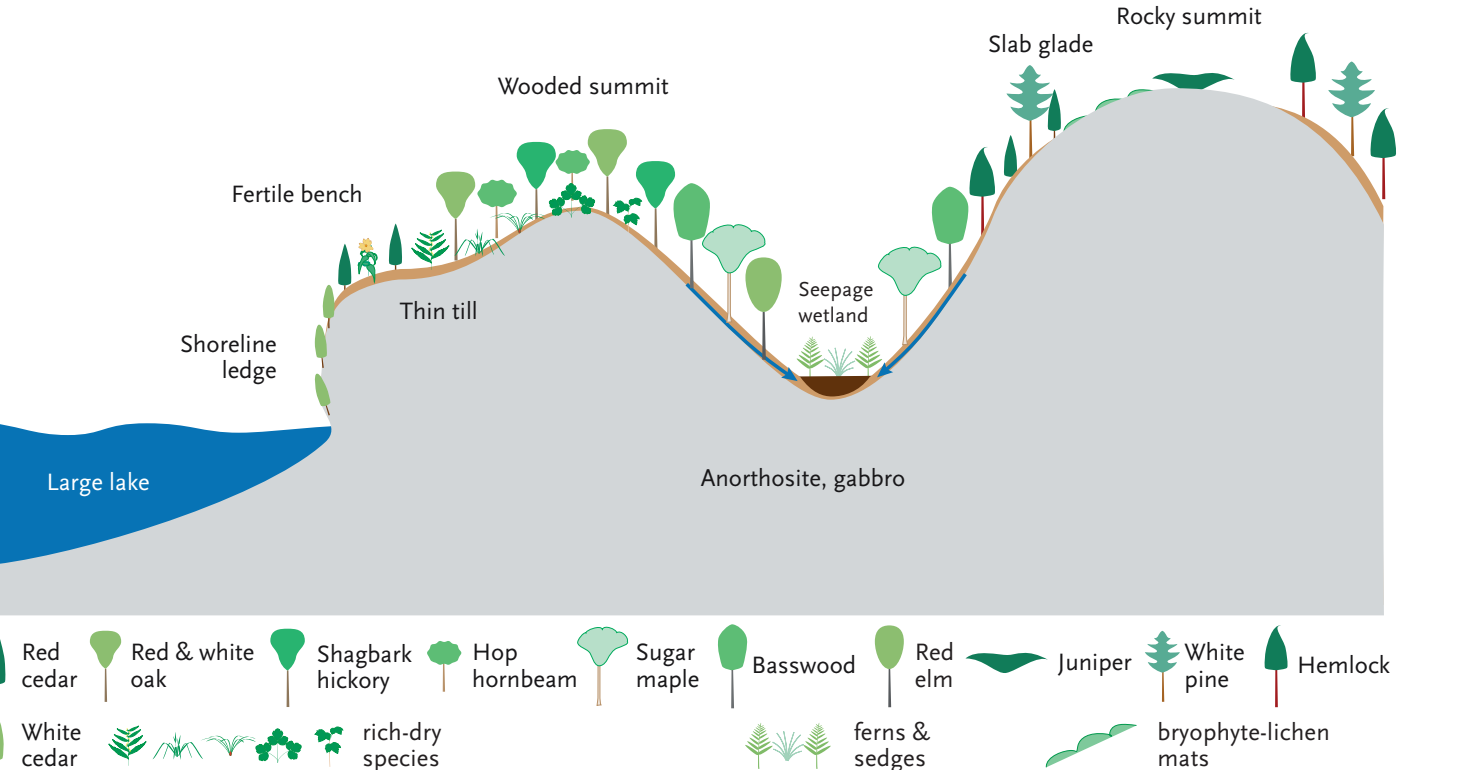
Sandy lake terraces and outwash plains with permeable soils, typically dry and fire-prone. Formerly quite open, with bluestem grasslands and low pines, oaks and shrubs. Now, with fire largely gone, succeeding to dense shrub thickets and pine-oak forests.

Major processes: Summer drought, nutrient and organic matter limitation, (formerly) fire, post-fire succession, seepage and ponding in depressions.



One of several landscapes (major deltas, dune systems, point bars, cobble shores) found on lakes large enough to have strong waves and surf. These are rocky shoreline hills steepened by undercutting. Typically they are steep and relatively dry, with thin soils. The one shown is on a fertile bedrock in the oak zone and has mixed oak-hickory-pine-cedar woods, with high diversity graminoid-herb communities on upper slopes and benches.

Major processes: wave action, rockfall, undercutting, glacial plucking, surface flow, fire.



Jerry Jenkins, 2015. A product of the Northern Forest Atlas Product
and the Wildlife Conservation Society Adirondack Program.

