

Occurrence, Composition and Formation of *Ruppia*, Widgeon Grass, balls in Saskatchewan Lakes

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Widgeon Grass (*Ruppia maritima*) is an aquatic vascular plant (Ruppiaceae) which has been the source for rare balls of plant material found at the shores of lakes on four continents. In North America, the lakes involved were in North Dakota, Oregon, and now northern and southern Saskatchewan. The formation of the balls has not been observed in nature, but similar balls have been produced in other studies with *Posidonia* or Turtle Grass (Hydrocharitaceae) fibers under the wavelike action in a washing machine. Our samples are from a saline lake in southern Saskatchewan (49°N), and an over 40-year-old sample from an unknown lake north of the boreal transition zone (52°N). Comparisons of the plant material with herbarium specimens confirm that the balls are almost entirely comprised of *Ruppia maritima*, with minor items including invertebrate animal parts, sand pebbles and feathers. The context in which the material was found is consistent with the proposition that they are formed by *Ruppia* inflorescences breaking apart, drifting to near shore due to wind and being rolled into balls by wave action.

Key Words: *Ruppia maritima*, Widgeon Grass, plant balls, saline lake, Saskatchewan.