

**HIGH-PRECISION MEASUREMENTS OF WETLAND SEDIMENT ELEVATION: I.  
RECENT IMPROVEMENTS TO THE SEDIMENTATION--EROSION TABLE  
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**ABSTRACT:** The sedimentation--erosion table (SET) developed by Boumans and Day (1993) is herein renamed the surface elevation table (SET) to better reflect the conceptual view of the processes being measured. The SET was designed for making high-resolution measurements of small-scale changes in elevation of loose, unconsolidated sediments in shallow water and mudflat habitats. The SET has undergone three major improvements to increase precision and so that it can be used to measure sediment elevation in vegetated wetlands as well as shallow water habitats. The remote-release "sliding plate" mechanism has been replaced with a single plate, collars (first 2.5 cm then 7.5 cm in length) have been attached to the plate to reduce play in the placement of the measuring pins, and the brass measuring pins have been replaced with fiberglass pins to reduce bending and consequent loss of precision. Under ideal laboratory conditions, the 95% confidence limit for individual pin measurements averaged about  $\pm 1.4$  mm (range  $\pm 0.7$  to  $\pm 1.9$  mm). These modifications have resulted in a reduction of error by about 50%.