

Rain gauge systems at the Center for Urban Horticulture,  
University of Washington, Seattle and at the Viewlands  
Elementary School, Seattle.

Photographs - Urban Horticulture Center by Stephen Burges

Photographs - Viewlands Elementary School by Adrienne  
Miller

Experimental Plots

University of Washington

500 yds



An aerial photograph of a large, dry, brownish field. In the upper left, there is a paved area with some greenery and a red curb. In the center, there are several rectangular plots of green grass. To the right of these plots, there are two small, white, rectangular structures, likely weather stations. A blue arrow points from the 'Plots' label to one of the green plots. Two red arrows point from the 'Weather Stations' label to the two white structures. A black arrow points from the company names box to one of the white structures. The field is surrounded by trees and some buildings in the background.

Plots

Weather Stations

Belfort  
Surface TB3  
Novalynx  
Texas Electronics

Summer 2005

25 yds





Buried rain gauges, Center for Urban Horticulture, University of Washington, Seattle.

BG1 and BG2 are “Weather Measure” 193 mm accumulators.

RBG1 is a TB3 200 mm 0.2 mm/tip tipping bucket gauge.

RBG2 is a Texas Electronics Inc 154 mm 0.01 inch/tip tipping bucket rain gauge.

Plots 1 and 2 (P1 and P2) are 30 feet by 8 feet wide by 1 foot deep.











Novalynx  
TB3  
Belfort Gauges





Surface mounted TB3 rain gauge and rain accumulation collector system, Center for Urban Horticulture, University of Washington, Seattle





Collector System moved by  
sliding two supports then  
moving collector rain gauge





Buried TB3 between  
plots 3 and 4



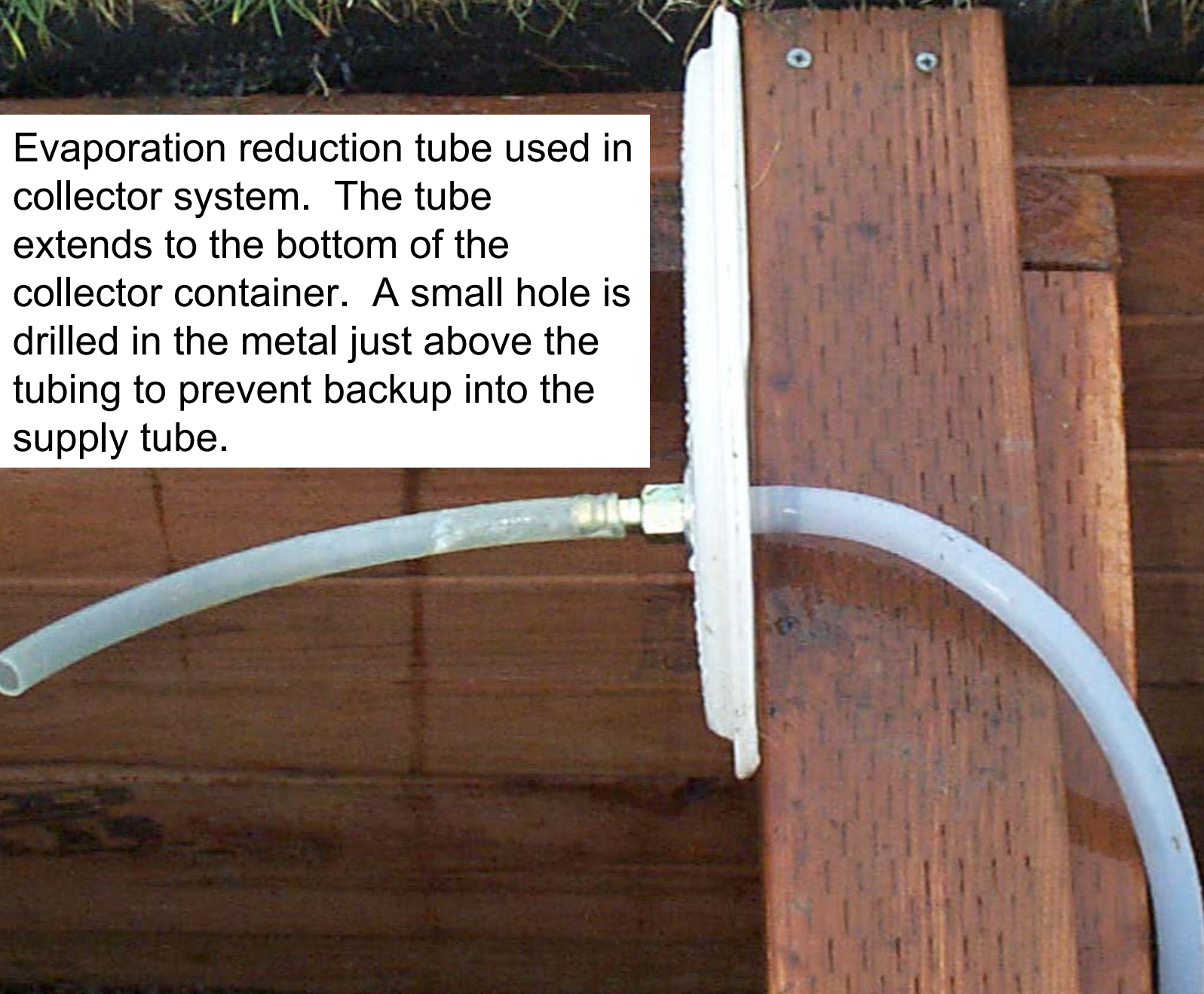


Buried TB3 CUH showing collector system. All water that flows through the tipping buckets drains to collector container





Evaporation reduction tube used in collector system. The tube extends to the bottom of the collector container. A small hole is drilled in the metal just above the tubing to prevent backup into the supply tube.











Buried gauges TB3 and Nova Lynx accumulator gauge (foreground) plus furnace filter anti splash system at Viewland Elementary School, Seattle.





Buried “pit” TB3  
at Viewlands  
Elementary  
School, Seattle





Tipping mechanism for the TB3 200 mm Hydrological Services rain gauge. The input to the buckets is via a siphon. Calibration  $\pm 3\%$  from 50 to 500 mm/hr.





Surface mounted TB3 tipping bucket rain gauge with rain accumulator collection system, Viewlands Elementary School, Seattle.





Hydrological Services Pty Ltd 200 mm TB3 (0.2 mm/tip) tipping bucket rain gauge, rain accumulation collector, field calibration device and anemometer at Viewlands Elementary School, Seattle.

The calibration device works on the Mariott tube principle and provides steady delivery rates. Standard Nozzles provide for delivery rates of 50, 100, 200, 300, and 500 mm/hr. A modified design permits delivery rates of 10 to 50 mm/hour. Most calibrations are checked at 50 mm/hr.

The siphon holds 8 ml of water then delivers at a constant rate.