Procedure for determining relative elevation

1) Place the fiberglass staff next to the measuring pole with the measuring tape to the top of the pole. Record the number on the measuring pole that corresponds to the height of the staff.
2) One person stands as close as possible to creek bank with fiberglass staff
3) A second team member stands 10 m away along transect with measuring pole.
4) The person with the fiberglass staff sights over the staff, looking to the horizon.
5) The person with the measuring pole raises/lowers finger until finger is inline with staff top and horizon. Record the number nearest your finger.
6) Substract the number recorded in Step 1 from the number recorded in Step 5. The difference is the height of the spot relative to the creek bank

In the example below, the first spot is 20 cm (73 cm – 53 cm = 20 cm) above the creek bank. The second spot is actually 5 cm below the creek bank (48 cm – 53 cm = -5 cm). The final spot is 60 cm above the creek bank (113 cm – 53 cm = 60 cm).