

Figure 2. Example of a charcoal sample packet deployment.

At most sites, the rocks with attached charcoal packets were secured using parachute cord so they could be easily recovered if the river stage changed dramatically during the dye trace. At the Suwannee River boat ramp, Seven Sisters (Five Hole) and Stevenson Spring sites, the charcoal packets were deployed directly into these sites without parachute cord tethers. At Alapaha and Holton Creek Rises, two charcoal packets were deployed at each site with tethers, one from the USGS water level platform and the other at an upstream (Holton Creek) and a downstream (Alapaha Rise) location near the platform. This deployment strategy was used to prevent a complete loss of data in the event a carbon pack was tampered with, and to produce an overlap in sample packet deployment times which could assist with determining dye arrival windows.

Background sampling utilizing the charcoal packets were conducted to verify that no dyes were present at the introduction and/or monitoring sites. Several rounds of background samples were collected, but only the ones closest to the dye introduction date were analyzed. Those background samples were non-detect for the presence of dye.

At Alapaha Rise and Holton Creek Rise, two ISCO automated samplers were deployed and programmed to collect a water sample every 12 hours. A photograph of the Alapaha Rise sampling station can be seen in Figure 3 and a diagram of the set-up is provided in Appendix II. By staggering the collection times, a water sample was collected every 6 hours. If dye was detected, this arrangement provided sufficient frequency of samples to narrow the arrival time to a 6-hour window and would allow a detailed dye curve to be generated. Also, in the event of equipment failure and/or vandalism of one of the ISCOs, there would be enough samples for analysis from the sampling sites.