Divotdensity Readme

To estimate the overall distribution of feeding divots, we performed weekly surveys (June to July 2009) within the 1.8 km in length focal stream reach. In each habitat that contained sand and silt patches, we estimated divot density along two transects. For each transect, in each of four 0.25 m2 quadrats we counted all divots, measured the diameter and depth of four representative divots, estimated the volume of sand displaced (approximated as a cylinder), and computed total sediment moved as the average divot volume multiplied by the total number of divots.

Column headers

Site: internal site references, Longitude and Latitude provided for site locations

Transect: 2 transects were sampled at each site

Quadrat: Four 0.25 m2 gridded quadrats (grid square 10 cm x 10 cm)

# of Divots: count of all observed divots within quadrat

# of Grid Squares: count of grid squares within quadrat containing divots (25 total grid squares)

D#W, D#D: width (mm) and depth (mm) of four representative divots within the quadrat

Baby Divots (% cover): visual estimate of percent cover of small divots created by juvenile fish, typically less than 1 cm in width or depth

Volume (cm3/m2): calculated using an approximation of a cylinder using the average width and depth of the representative divots and number of divots

Weight (g/m2): weight of displaced sediment calculated using an approximation of 1.74 g/ cm3

Fish abundance: number of tagged individuals of Catostomus insignis in the nearest daytime refuge site

Distance from high fish: distance in m from refuge site with high fish counts

%cover: calculated from # of Grid squares/25