* This data set includes spatially explicit mark-recapture data of the Northern Spring Salamander (Gyrinophilus porphyriticus) collected during the summer months (June – August) from downstream and upstream reaches in multiple streams in the Hubbard Brook Experimental Forest. Downstream reaches begin at the confluence with the Main Hubbard and extend upstream 500 meters and upstream reaches begin at the weir and extend downstream 500 meters. Downstream reaches contain brook trout and upstream reaches do not. We used a robust design framework with approximately 9 surveys per reach each summer (3 primary occasions with 3 secondary occasions each). Salamanders were captured by hand and marked with either Visual Implant Elastomer and/or a PIT tag.

These data were gathered as part of the Hubbard Brook Ecosystem Study (HBES). The HBES is a collaborative effort at the Hubbard Brook Experimental Forest, which is operated and maintained by the USDA Forest Service, Northern Research Station.

These data have been published in the following papers:

Lowe WH, Addis BR, Smith MR, Davenport JM. The spatial structure of variation in salamander survival, body condition and morphology in a headwater stream network. Freshwater Biol. 2018;63:1287–1299. https://doi.org/10.1111/fwb.13133

Lowe, W. H., and Addis, B. R.. 2019. Matching habitat choice and plasticity contribute to phenotype–environment covariation in a stream salamander. Ecology 100( 5):e02661. 10.1002/ecy.2661

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Bryant, A.R., Gabor, C.R., Swartz, L.K., Wagner, R., Cochrane, M.M., Lowe, W.H. Differences in corticosterone release rates of larval Spring Salamanders (Gyrinophilus porphyriticus) in response to native fish presence. Biology 2022; 11.484. https://doi.org/10.3390/biology11040484

Addis, B.R., and W.H. Lowe. Environmentally associated variation in dispersal distance affects inbreeding risk in a stream salamander." The American Naturalist 2022.