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**Data Sets** 

Center for Fisheries, Aquaculture, and Aquatic Sciences

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# Early generation hybrids may drive range expansion of two invasive fishes DataSet

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## Early generation hybrids may drive range expansion of two invasive fishes dataset

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## List of files and description of column headings

- 1. Ranges.csv Mean annual range for individual bigheaded carps
  - a. Group SC = Silver Carp, AGSC = Advanced generation Silver Carp hybrids, EG =
     Early generation hybrids, AGBC = Advanced generation Bighead Carp hybrids, BG
     = Bighead Carp
  - b. ID Identity of individual fishes
  - c. Range km Mean annual length of river used by individual fish (km)
  - d. Quantile Indication of groupings for analysis, 1 = least mobile individuals, 4 = most mobile, analyses not conducted on EG (X)
- 2. MovementMain.csv Net and total distances of each observed movement as well as whether a fish was deemed to have moved or remained stationary.
  - a. Group SC = Silver Carp, AGSC = Advanced generation Silver Carp hybrids, EG =
     Early generation hybrids, AGBC = Advanced generation Bighead Carp hybrids, BG
     = Bighead Carp
  - b. month
  - c. year
  - d. id Identity of individual fishes
  - e. netdist Net distance moved (km), upstream values were positive and downstream values were negative
  - f. totalddist Total distance moved (km)
  - g. tl Estimated total length of fish at time of movement (mm)

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- h. moverate Rate of movement (km/day)
- i. movenomove Indicator of whether a fish moved (1) or remained stationary (0)
- j. change24TempA Change in temperature over 24 hours preceding movement (°C)
- k. changewkTempA Change in temperature of week preceding movement (°C)
- I. DTempA Average temperature on day of movement (°C)
- m. DDisA Average discharge on day of movement (m<sup>3</sup>/sec)
- n. WkDisA Change in discharge over week preceding movement (m³/sec)
- o. C24DisA Change in discharge over 24 hr preceding movement (m³/sec)
- 3. IndividualFishData.csv Basic information about each fish
  - a. Date Date fish was tagged and fin clip was collected
  - b. Year Year of tagging
  - c. Reach River pool fish was collected and tagged in
  - d. a' (SV) Proportion of alleles tested which were silver carp. Used to groups hybrids/parental species as described in text. A zero value indicates a bighead carp while a one indicates a silver carp. Values in between zero and one represent varying degrees of hybrids.
  - e. TL Total length of the fish at time of tagging (mm)
  - f. Weight Weight of fish at time of tagging (g)
  - g. Sex Sex of fish if observed during tagging, F = female, M = male, UNK = unknown sex