

MesoHABSIM 2008 Course Schedule

Monday September 8: US FWS office Hadley, MA 100 Westgate Center

8:00 am to 8:15 am: **Welcome and logistics**

8:15 am - 10:15 am: **Introduction to physical habitat models and MesoHABSIM**

- Physical habitat models
- MesoHABSIM approach
 - * survey techniques
 - * calculations
 - * results

10:15 am -10:30 am: **Break**

10:30 am - 11:50 am: **Biophysical templates**

- Biophysical templates
- Biological targets and indicators
 - Reference fauna
 - Existing fish community
 - Bioperiods
 - Indicators

12:00 pm -12:50 pm: **Break for lunch**

1:30 pm -3 pm: **Biological filters**

- Literature based
- Empirical data
 - Sampling
 - Multivariate Suitability criteria

3:00 pm -3:15 pm: **Break**

3: 15 – 5 pm **Instream Habitat Classification**

- Delineation
- Assessment
 - Sampling

- Filtering
 - Probability
 - Suitable, Optimal
- Validation

Tuesday September 9 Fort River Site in Groff Park, Amherst

8:00 am-4:30 pm: **Field data collection**

- Equipment demonstration
- Map hydromorphologic units (HMU)
- Measure water depth and velocity

12:00 pm -12:50 pm: **BBQ Lunch**

- Invertebrate and mussel sampling
- Grid Electrofishing
- Underwater Fish Observation

Wednesday September 10 US FWS office Hadley, MA 100 Westgate Center

8:00 am - 10:15 am: **Project preparation**

- Gathering background data and establishing geo-database
- Spatial delineation to Reaches, Sections and Representative Sites
- Obtaining templates for mapping and fishing
- Begin MesoHABSIM project
- Setup basic attributes

10:15-10:30: **Break**

10:30 am - 11:50 am: **MesoHABSIM software**

- Begin MesoHABSIM project
- Setup basic attributes

12:00 pm -12:50 pm: **Break for lunch**

1:30 pm to 3:00 pm **Entering data to MesoHABSIM software**

- Database import

- Import from Excel
- Manual input
- Associations
- Data validation

3:00 pm - 3:15 pm: **Break**

3:15 pm - 5:00 pm: **Enter hydromorphologic (HMU) data**

- Data QA&QC
- Data transfer
- Editing maps
- Create HMU maps

Thursday September 11 US FWS office Hadley, MA 100 Westgate Center

8:00 am to 10:15 am **Lab :Compute suitability criteria**

- Entering fish data
- Logistic regression model
- Enter available fish data
- Compute logistic regression with SPSS
- Input computed coefficients
- Import coefficients

10:15am to 10:30 am **Break**

10:30 am to 11:50 am **Lab :Compute suitability criteria:**

- Calculate habitat suitabilities
- Create habitat maps
- Reporting

12:00 pm -12:50 pm: **Break for lunch**

1:30 pm -3:00 pm: **Upscaling**

- Rating Curves
- Aggregation across the scales
- Generic and community habitat

3:00 pm - 3:15 pm: **Break**

3:15 pm - 5:00 pm: **Lab: Upscaling**

- Community rating curves
- Spatial aggregation
- Temporal aggregation

Friday September 12 US FWS office Hadley, MA 100 Westgate Center

8:00 am to 10:15 am **Adjusting biophysical template**

- Deficit analysis
- Rehabilitation Simulation
- Habitat Time Series
- Habitographs
- UCUT curves
- Flow management criteria

Break 10:15 am -10:30 am

10:30 am to 11:50 am **Lab: Simulation of restoration measures**

- Changing physical attributes
- Pristine flows

12:00 pm-12:50 pm: **Break for lunch**

1:30 pm -3:00 pm: **Lab: Simulation of restoration measures**

- Changing physical attributes
- River regulation

3:00 pm - 3:15 pm: **Break**

3:15 pm - 5:00 pm: **Interpretation**

- ACTograms
- Scenario comparison
- Integrative assessment

Discussion