



Health Assessment, Disease Certification and Disease Diagnostic Defined

Disease Certifications

- Annual inspection for pathogens of greatest concern (CCR Title 14, Section 245).
- All DFG Hatcheries and egg-take events (e.g., Pine Creek at Eagle Lake etc.).
- Generally one Disease Certification per species, per life stage (catchables and broodstock) per water source, per year, as applicable.
- The number of fish required for this random sample is a statistical determination for acceptable confidence, as according to the American Fisheries Society Blue Book.
- Virology (e.g., IHN), bacteriology (e.g., BKD), whirling disease, and others.

Health Assessments

- Measures parameters indicative of over-all fish health and development.
- Generally only Anadromous Hatcheries.
- Requested at the discretion of Hatchery Managers, but recommended.
- Based on published methodologies (numerous valid permutations exist).
- 20 fish, randomly sampled. One Health Assessment per species is generally sufficient.
- Measured length-weight ratio (condition factor).
- Scored observation of fins, eyes, gills, skin, pseudobranchs, thymus, mesenteric fat, spleen, liver, kidney, and gut.
- Measured blood parameters (hematocrit and plasma protein, rarely leucocrit).
- Scored observation of fish smoltification status.
- Best when performed immediately prior to release of fish.
- Not a thorough evaluation of specific diseases or pathogens.
- Scores are affected by nutrition, environment, disease, husbandry, genetics etc.

Disease Diagnostic

- Fish Pathologist responds to elevated losses at Hatcheries in effort to determine cause of losses.
- Usually on-site microscopy, but also virology, parasitology, bacteriology and other disease diagnostic procedures as necessary.
- Pathology Report describes recommended therapy which may include antibiotics, chemical treatments, nutrition, vaccines, husbandry (etc.) within the lawful regulations set forth by the FDA and Regional Water Boards (etc.).
- Most common site visit by Fish Pathologists.

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