

UDN – Ulcerative Dermal Necrosis

UDN is a disease mainly affecting wild salmon, sea trout and sometimes other salmonids like brown trout. It usually occurs in adult fish returning from the sea and starts as small lesions on the scale-less regions of the fish, mainly the snout, above the eye and on/ above the gill cover. On entry to fresh water lesions ulcerate and may become infected with secondary pathogens like the fungus *Saprolegnia* spp.

The disease can be divided in 4 categories:

- Stage 1: unusual marks/ discolouration on the head, sometimes symmetric



- Stage 2: Bigger areas affected, grey, ragged appearance, rough surface, not ulcerated yet



- Stage 3: Ulcerated areas, but no fungal growth yet



- Stage 4: Ulcers with fungal growth, fungus spreading over the whole body



UDN occurs in cold water temperatures only and disappears over the summer. The last major outbreak was in the late 1960's/early 1970's and caused huge losses in the wild salmon population.

I am looking for the early stages of the disease before any fungal growth and would appreciate any help, e.g. pictures of diseased fish, estimates on how many fish are affected, and ideally samples from them – **if you're willing to sample fish for me however, please let me know so that I can teach you and send material since the samples have to be taken in a very specific way and only samples from freshly killed fish are of use for my PhD!**

Thank you very much!