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Title:

Effects of urea application, aeration, and drying on total carbon concentrations in pond

bottom soils

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Abstract:

Aerated ponds did not accumulate as much carbon in bottom soils as control ponds. Application of urea to manured ponds did not accelerate carbon loss from bottom soils. When ponds were drained for fish harvest, appreciable carbon was eroded from the surface layers of bottom soil. Further decomposition of soil carbon occurred during the 5-week drying period between crops. Within-pond variation in soil carbon concentration was high; a technique for selecting replication and sample size requirements for experiments on changes in bottom soil carbon concentration is provided.

This abstract was excerpted from the original paper, which was published in *The Progressive Fish-Culturist* 55:210-213, 1993.

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