Title: Pond Bottom Soils

Author(s): C.E. Boyd¹, and J.R. Bowman¹

¹. International Center for Aquaculture and Aquatic Environments, Department of Fisheries and Allied Aquacultures, Auburn University, Alabama

Date: 20 November 2017          Publication Number: CRSP Research Report 97-A12

The CRSP authors will not be distributing this publication. Copies may be obtained by writing to the authors.

Abstract: The importance of soil characteristics in pond construction was discussed in Chapter 5. Characteristics and condition of bottom soil are also important in pond management. The exchange of substances between soil and water affects water quality, which in turn influences fish production. Although it is generally recognized that there are strong effects and interactions among soil characteristics, water quality, and fish production in ponds, much more attention has been given to water quality than soil condition as a factor limiting fish production in ponds. The PD/A CRSP has placed emphasis on measuring the effects of pond water quality variables on fish production and developing management procedures for improving water quality. However, some research has been conducted on pond soils, and future work on pond dynamics will no doubt have a greater focus on pond soil condition.

The purpose of this brief chapter is to provide the reader with an overview of the role of bottom soil in pond aquaculture and to provide a summary of PD/A CRSP research on pond soils.

This abstract is excerpted from the book chapter, which was published in H.S. Egna and C.E. Boyd (Editors), Dynamics of Pond Aquaculture. CRC Press, Boca Raton, FL, pp. 135-162.