Phosphorus, Food, and Our Future

Do you know where your bones come from? As it turns out, the bulk of them come from just northeast of here, from the massive phosphate rock mines in the well-named “Bone Valley” near Tampa. But this might not always be the case. Want to learn more? Come and dig deep into phosphorus.

Phosphorus, the 15th element in the Periodic Table, is both essential (for DNA, bones) and limiting (to crops, to algae). Thus, we rely on mined P resources for fertilizer production to maintain the Green Revolution while diffuse P runoff increasingly compromises water quality in lakes, rivers, and coastal oceans. Indeed, of the major biogeochemical cycles, the cycle of P has been most severely disrupted by human activities during the dawn of the Anthropocene. This talk will discuss various dimensions of the P sustainability challenge, from expanding demand and rising fertilizer prices to widespread proliferation of toxic algal blooms due to diffuse runoff of excess fertilizer. The talk will also describe recent developments in the global P sustainability movement. These efforts seek to accelerate the emergence of improved practices and technologies that can result in a closed food system P cycle during coming decades.

Featuring
Dr. James Elser
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Thursday, January 28, 2016
7:00 p.m.
The Kampong Tropical Botanical Gardens
4013 Douglas Road
Coconut Grove, FL

Presentation open to the general public followed by a wine and cheese reception.

If you have any questions about this event visit http://biology.fiu.edu/seminars-2016/ or contact Jeffrey Wells at 305-348-1320 or jedwell@fiu.edu.