Composting and Red Tide- Animal Mortality Composting May Hold Potential for Handling Fish Remains

Resources generously provided by <u>Brenda Platt</u> from the <u>Institute for Local Self</u> Reliance and Jean F. Bonhotal from Cornell Waste Management Institute.

Benefits of Animal Mortality Composting (from 12p fact sheet):

- Pathogen kill occurs in thermophilic composts
- Can be done any time of year
- Can be done using common highway (or small scale farm/garden) equipment, readily available materials and at different scales
- Relatively odor free
- All sizes of animals can be composted
- Relatively low labor and management needed
- Low cost

Overview (composting fish waste & road kill):

- 12p illustrated fact sheet (PDF) on the "how to" of composting road kill deer, 2007.
- 8-minute DVD accompanies the 12p fact sheet (download), 2007.
- Composting fish waste: http://compost.css.cornell.edu/fishwaste.html
- Illustrated poster (PDF), 2007.
- What To Do With A Dead Deer: Compost It. <u>Article</u> published in the Cornell Chronicle. 2012.
- Maine's composting regulations specifically address fish waste as Type IC residuals documented in 2016 (https://ilsr.org/rule/on-farm-composting/maine/) w/ current regs https://ilsr.org/rule/on-farm-composting/maine/) w/ current regs <a href="https://example.com/ht

Additional Resources:

- Composting Road Killed Deer in New York. <u>Article</u> published in BioCycle 45(5):25-26, 2004.
- Composting Commercial Fish Processing Waste (from Michigan Great Lakes w/comments on mercury and halogenated hydrocarbons): (PDF), 2005.
- Relevence and Persistence of Pathogens in Mortality Composting a Literature Review.
- Environmental Effects of Mortality Disposal. Proceedings from the 3rd International Symposium: Management of Animal Carcasses, Tissue and Related Byproducts. 2009
- <u>Links</u> to project reports and photos Pathogen Analysis of NYS Department of Transportation Road-killed Deer Carcass Compost Facilities.

Avian Influenza and Poultry Composting:

Avian Influenza and Poultry Composting resource page by Cornell WMI

- 12p illustrated fact sheet (<u>PDF</u>) for poultry composting and addresses the emergency response to disease control, 2008 (revised 2016).
- 6-minute video "Composting Poultry Mortality" complements the fact sheet (<u>download</u>), 2008.
- Illustrated poster (PDF or Powerpoint), 2008.
- A literature review (<u>PDF</u>) of avian influenza and methods of disposal of affected poultry, 2008.
- Emergency Response Planning for Disposal of Avian Influenza Affected Birds in NYS. Proceedings from the 3rd International Symposium: Management of Animal Carcasses, Tissue and Related Byproducts. 2009.
- Mortality Composting Protocol for Avian Influenza Infected Flocks FY2016 HPAI Response. 31p procedure manual. Manual can also be access <u>here</u>. 2016.
- Mortality Management Options During an Avian Influenza Outbreak. This 70-min. webcast provides a curent update of the outbreak and highlights mortality management options. <u>View here</u>. October 2015.