

Water Quality Impacts of Poultry Manure Headland Stacks

Introduction

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Poultry sheds are located throughout the state

Broilers

Ducks

Layers

Turkeys



Goal of the study

- Investigate the potential for nutrients to move from headland stacked poultry manure into waters of the state (surface or groundwater).



Headland Stacks

- Headland stacks are manure piles stored on bare soil at the edge of crop fields until the field is ready for application.
- Stacks are normally applied to fields within three months, but may remain in place for up to one year.

Headland Stacks

- Stacking, while not unique to poultry (also common on farms that haul daily or clean livestock lots), is common in the poultry industry because of the manure's high dry matter content.

Definitions:

Headland staging – Field stacking up to 10 days

Headland stacking – Field stacking from 11 to 365 days

Pad storage – manure stored on asphalt pads.

Stacking Pad



Study design

- **To better understand the potential water quality challenges from headland stacks of poultry manure, the study was divided into three phases:**
 - **Nutrient content variations in different turkey manure “types”**
 - **Headland stacking effects on surface water**
 - **Headland stacking effects on groundwater**

Information Available

- **Briefs / Articles** - two page articles summarizing the information gathered through each phase of the study. These articles include:
 - Discoveries on Headland Stacked Poultry Manure
 - Characterization of Poultry Manure - 1
 - Potential Runoff of Stacked Poultry Manure - 2
 - Stockpiling Manure and Soluble Salts: Site remediation for Crop Production - 3
 - Effect of Headland Stacking of Poultry Manure on Groundwater - 4

Information Available

- **Factsheets** – six page factsheets that provide much of the information and data gathered through each phase of the study. These factsheets include the following topics:
 - Characterization of Poultry Manure - 1
 - Potential Runoff from Stacked Poultry Manure - 2
 - Stockpiling Manure and Soluble Salts: Site Remediation for Crop Production - 3
 - Effect of Headland Stacking of Poultry Manure on Groundwater - 4

Information Available

- **Presentations and slides** –presentations are organized in the following manner on our website:
 - Discoveries on Headland-Stacked Poultry Manure
 - Characterization of Poultry Manure - 1
 - Potential Runoff of Stacked Poultry Manure - 2
 - Stockpiling Manure and Soluble Salts: Site Remediation for Crop Production - 3
 - Effect of Headland Stacking of Poultry Manure on Groundwater - 4



For Additional Information

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