

Harvesting Cattails

Harvesting cattails can be challenging and costly, if not impossible, depending on conditions. Removal from controlled environments like the North Ottawa Impoundment in West Central Minnesota provide greater certainty in cattail harvesting dates, cattail condition and composition, required equipment, and harvesting costs.

Harvest Conditions

Harvesting cattails from traditional wetlands presents a number of risks. Depending on moisture levels, harvest may not be possible or difficult as equipment may become stuck. The effort required, including labor and removal equipment, to free equipment may make cattail harvest in a given year or as an ongoing enterprise uneconomical.

Green Cattail Harvest

We focus here on green cattail harvest as it best provides the desired benefit of removing nutrients from the watershed. Using traditional agricultural equipment requires a controlled environment so that moisture levels can be quickly reduced making the field accessible to equipment and trapping nutrients in the biomass for removal. Waiting for dryer conditions will typically result in harvesting dead cattails that have much lower nutrient content and poorer characteristics for certain uses. Green cattail harvest would typically occur in late summer when cattail biomass and nutrient retention is greatest.



Two Harvesting Alternatives

We consider two types of green cattail harvest under controlled conditions: chopping and spreading of cattail as a soil amendment, and baling for use as animal feed. Green cattail moisture levels would likely be too high for long-term storage, long-distance transportation, and certain uses.

Equipment

Traditional forage crop harvest equipment should be suitable for green cattail harvest. The system including machinery needed is similar to corn silage harvest and traditional forage haying. Equipment to chop, haul, and spread or to cut, condition, bale, and feed cattail is necessary.

Harvest Costs

The cost to harvest cattail can be estimated using existing chopping or baling knowledge; using decision tools or custom rates for chopping or baling available from university Extension or a calculator developed specifically for cattail harvest by NDSU Extension available at <https://www.ag.ndsu.edu/bioeconomics>. The cost to chop and spread one ton of green cattail is estimated to be about \$20 while the cost for baling is about \$10.

Other Concerns

Beyond concerns about moisture, high quantities of dust can be expected. This was the situation for the 2016 demonstration harvest at the North Ottawa Impoundment which resulted in challenges for the following truck to operate.

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