Massachusetts Mobile Poultry Processing Units

New Entry Sustainable Farming Project

New England Small Farm Institute
Poultry Processing – the missing link

• Growing demand for local, farm-raised meat & poultry (>250 FM)
• Small-scale producers with limited access to legal processing facilities
• Affordability of small-scale infrastructure
New England Poultry Processing Plants

[Map of the United States highlighting New England region with different symbols and color codes indicating various categories of poultry processing plants.]
Current and Potential MA Poultry Producer-Processors

- NESFI Open Air
- Potential 2012 Berkshire MPPU
- New Entry Enclosed MPPU
- Potential 2012 MPPU users
- Island Grown MPPU/Martha’s Vinyard
- USDA Plant (Vermont)
- Potential Docking Station
History of Massachusetts MPPUs

- 1999
  - NESFI - W. Mass Farmer Unit
- 2006 - 2007
  - Open Air Unit Demo & Data Collection and Regulatory Feedback/Modifications
- 2008-2010 (4 yrs Pilot Project)
  - Approval of open-air prototype (Unit #1)
  - 7+ licensed users
  - > 180 producers “trained”
  - July 2010 – USDA Plant opened in Vermont
  - Alternate model - enclosed unit
- 2011
  - Enter “routine status” by DPH
  - Approval of Enclosed Prototype (Unit #2)
  - ....more on-farm facilities licensed
Evolving process with regulators

- MDPH FPP – requires $225/yr license
- MDEP – wastewater / solid waste disposal
- MDAR – animal health / compost reg
- “Home Rule” - Local BOH - approvals

Major Support / Funding from:

- USDA Rural Development - RBEG
- Mass Society for Promoting Agriculture
- Mass Dept of Ag Resources
  - Agricultural Innovation Center
- Northeast SARE R&E
- Individual Donors (thanks!)
MPPUs in Massachusetts

Unit #1
“Western Mass” operated by New England Small Farm Institute

Unit #2
“Eastern Mass” operated by New Entry Sustainable Farming Project

MPPT
“Martha’s Vineyard” operated by Island Grown Initiative
Unit #1 – Open Air Prototype

- 24’ utility trailer
- Slatted composite floor
- 6 fixed broiler cones & cabinet
- Electric stun knife
- Poultryman scalder/picker (custom chute)
- Small holding tank
- Propane heater for handwash sinks
- *Extensive* custom fabrication
- $25-35,000 to replicate
Operating Costs – Unit #1 (open air)

- Membership fee ($100/yr)
- Per-Bird fee ($2.25/bird)
- Transport (paid by user)
- Manager travels w/ unit
- Costs covered in 2011
  - Net profit = $203.25
- 2,021 birds processed
- 3 producers/users
- Est. economic value = $40,000+
### Lessons Learned – Unit #1 (open air)

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>Durability on long hauls</td>
<td>Clean up</td>
</tr>
<tr>
<td>Weather</td>
<td>“Ambiance”</td>
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<tr>
<td>Equipment Issues</td>
<td>Ease of transportation</td>
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<tr>
<td>Waste Handling</td>
<td>Repairs/Maintenance</td>
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<td>Less costly to construct</td>
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Unit #2 – Enclosed Prototype

- 26’ aluminum trailer
- 12’ tall; 9,000 lbs (1,800 on tongue, bumper pull)
- Ashley kill cabinet & 8 broiler/4 turkey cones
- Electric stun knife
- Ashley AM30 scalder
- Pickwick SPJ30 picker w/ kickout chute
- Wall and pass-through
- 4-man evisceration table
- Electric on-demand heater for handwash sinks
- “Bells & Whistles”
- 10 kw diesel generator
- $ 90,000 to replicate
Operating Costs – Unit#2 (enclosed)

- No membership fee
- Rental fee (sliding scale; $1/bird)
- Transport (paid by user)
- Extensive training and on-site supervision on first use
- No regular unit manager
- Out-of-Pocket Costs covered
  - **BUT** no repair /maint /escrow or mgmt / admin income generated in 2011 (first year)
- 2,580 birds processed
- 2 producers/users; 14 producers at community processing day
- *Est. economic value = $56,000*+

### 2012 MPPU Rental Fees

<table>
<thead>
<tr>
<th>Number birds</th>
<th>Rental Fee</th>
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<tbody>
<tr>
<td>&lt; 150 birds</td>
<td>$ 150</td>
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<tr>
<td>151-200</td>
<td>$ 200</td>
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<tr>
<td>201-250</td>
<td>$ 250</td>
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<td>251-300</td>
<td>$ 300</td>
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<tr>
<td>301-350</td>
<td>$ 350</td>
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<tr>
<td>351-400</td>
<td>$ 400</td>
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# Lessons Learned – Unit #2 (enclosed)

## Challenges
- Transportation – towing
- Clean up
- Leveling
- Operational “kinks”
- Costly repairs

## Benefits
- Higher through-put
- Generator – location flexibility
- “Weatherproof”
- Waste management
- Privacy (NIMBY!)
- USDA Inspection?
Management Lessons Learned

1. Attracting Producers
   - is there a market?

   - Market Survey
   - Competitive analysis
     - New USDA Plant
     - DPH pref for on-farm
   - Regulatory compliance
   - Transportation
   - DIY? Labor? Cost?
Production and Processing Calculators

http://nesfp.nutrition.tufts.edu/training/MPPU_Calculator.html
Management Lessons Learned

2. Do you have a Viable Business Plan?

- Repairs / upkeep
- Management fees
- Depreciation
- Replication?
Management Lessons Learned

3. How will you provide Unit oversight?

- Producer-Processor Trainings
- On-Farm “Overseer” role?
Management Lessons Learned

4. What is your Shared Use Management Policy?

• Inventory
• Cleanliness
• “Not my fault”
### Future Plans / Addressing Challenges

<table>
<thead>
<tr>
<th>Unit #1 (open air)</th>
<th>Unit #2 (enclosed)</th>
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<tbody>
<tr>
<td>• Unit Manager &amp; licensed trained crew</td>
<td>• Docking stations or “neutral sites”</td>
</tr>
<tr>
<td>• Smaller travel radius</td>
<td>• 50-150 birds (smallest scale)</td>
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<tr>
<td>• Equip fixes</td>
<td>• Licensed “trained crew”</td>
</tr>
<tr>
<td></td>
<td>• On-farm DIY rentals (&gt;200 birds)</td>
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<td></td>
<td>• Dedicated tow truck</td>
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<td></td>
<td>• USDA Inspection?</td>
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Thank you and Questions?

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For more MPPU information, visit our website:
http://www.nesfp.org

Thank you to our livestock / MPPU training and education funders:

United States Department of Agriculture National Institute of Food and Agriculture