

An aerial photograph of a rural landscape. A dark river flows along the left side. The land is divided into various fields, some green and some brown, suggesting different crops or stages of harvest. A farmstead with several buildings is visible in the center-right. The background shows more fields and a line of trees.

Maine's Role in Creating a Sustainable Regional Food System: Opportunities and Challenges

Tim Griffin
Agriculture Food and Environment Program

Gerald J. and Dorothy R.
Friedman School of
Nutrition Science and Policy

Tufts
UNIVERSITY

get
real.
get
maine!

Topics for Discussion

- Pushing vs. Pulling
- Overlapping scales in the food system
- Food self-reliance for New England, briefly
- Opportunities and Challenges



Pushing vs. Pulling



- Accounts for resource base
- Current and future production
- “Grow it and they will eat it”

- Role of consumer demand
- Willingness to pay
- Disparities in food access



Pushing *and* Pulling are Important Applies to many scales



Food Systems Scales and New England

Food Systems Scales

- “The Local”
 - Tremendous interest
 - New England leads in direct to consumer
 - Rapid growth, from a small starting point
 - Conflated with scale, method of production, and nutrition



Food Systems Scales

- “The Industrial”
 - An assumption about scale (large)
 - Producing both feedstocks and foods
 - Provides a large portion of US food supply
 - *Also* conflated with many other characteristics



Food Systems Scales

- “The Global”
 - The Corporate Food System
 - Viewed mostly from farm gate outward
 - Players might be large, small, local, etc.

Food Systems Scales

- “The Regional”
 - Scale is variable (depends on who you ask)
 - More dependent on supply chains than Local
 - Potentially shorter supply chains than Industrial

Scales *Overlap*, and they should *Communicate* and *Compliment*



ie. they are not separate and distinct!

Supply Chains in Food Systems Research



Processing/Distribution

- Northeast region
- Market basket of products
- Price & access
- Supply chain characteristics
- Production capacity
- Scenario evaluations



Ken Hammond, USDA

Access in Communities

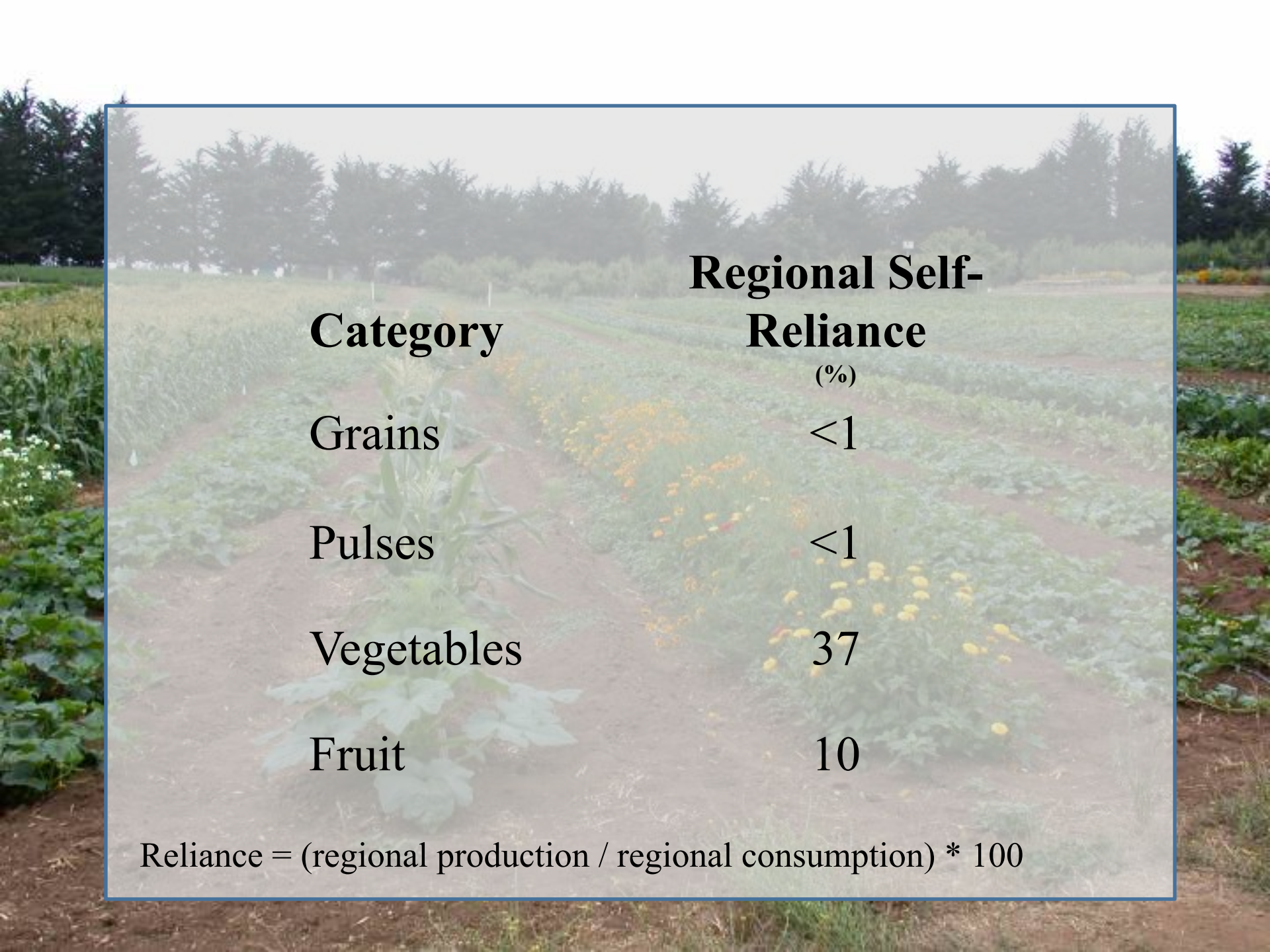


Farm-level Production

USDA-NIFA-Grant
2011-68004-30057

Regional Self Reliance for
New England region =
Production / Consumption





Category	Regional Self-Reliance (%)
Grains	<1
Pulses	<1
Vegetables	37
Fruit	10

Reliance = (regional production / regional consumption) * 100



Vegetable Group	Regional Self-Reliance
	(%)
Dark Green	1
Starchy	80
Red and Orange	9
Other	8



Fruit Group

Regional Self-Reliance

(%)

“Commonly Eaten”

5

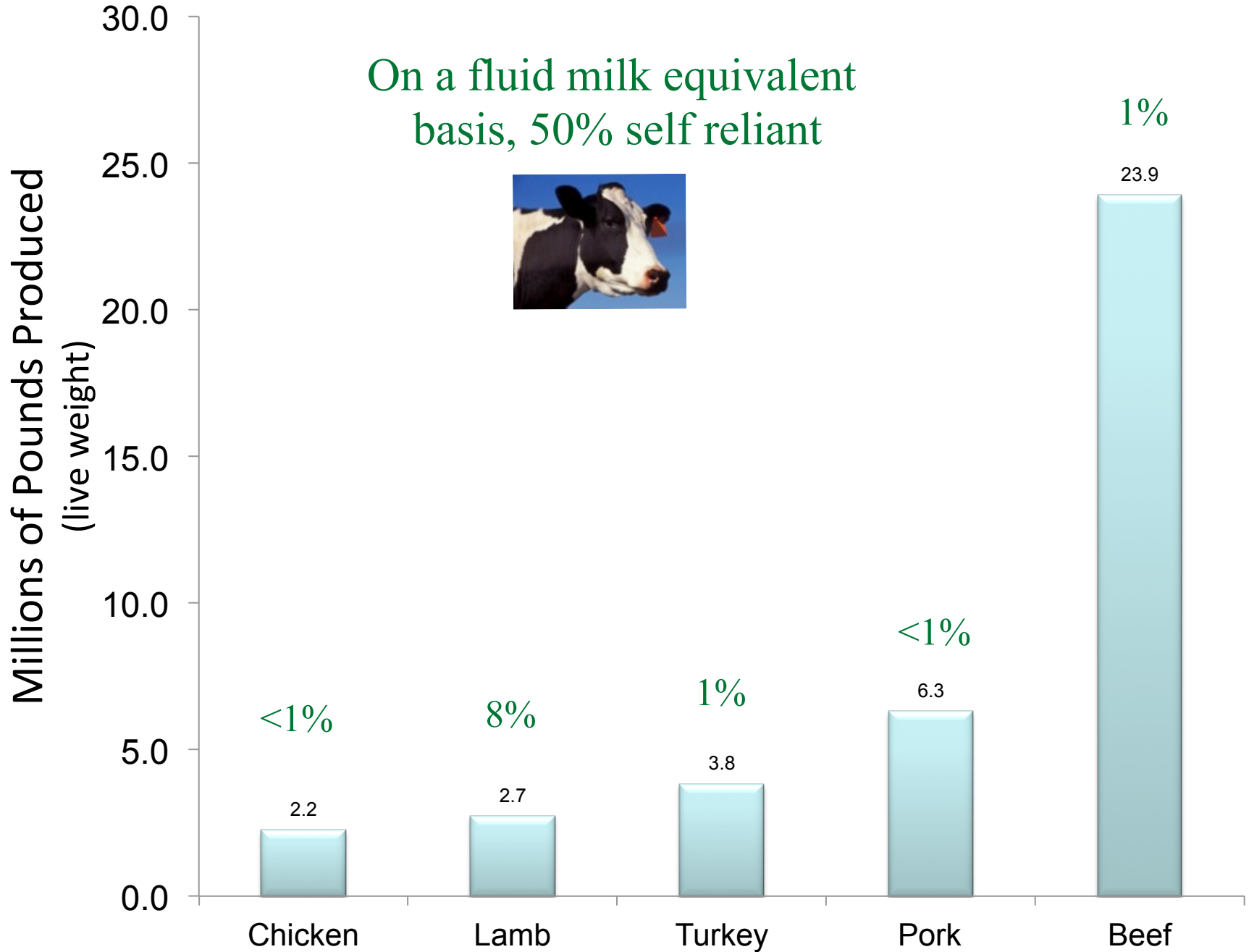
Berries

136

Melons

<1

New England Regional Livestock Production



Opportunities and Challenges

Limits of direct-to-consumer, Building demand, Seasonality, Competitiveness, Aggregation, Strategic planning

Limits of Direct-to-Consumer

National Count of Farmers
Market Directory Listings



Source: USDA-AMS-Marketing Services Division

Limits of Direct-to-Consumer

- Seasonal availability (for produce anyway)
- Limited hours for markets
- Stratified consumer base
- *Perception* of higher prices

Building Demand

- A series of small wedges?
 - School districts working with multiple farms
 - Universities
 - Hospitals/health care facilities
 - Veggie prescriptions

Building Demand

- Regional supply chains that move food to population centers
- At the retail level
 - Assumed price premiums impact food access
 - Broad-based access to food from Maine and region

Seasonality

- Fresh food not available year-round from Maine
- Options for out-of-season availability depend on *food businesses*
 - Refrigeration and freezing
 - Processing
 - Manufacturing
 - Distribution to wholesale and retail

Competitiveness

- Higher input costs in the region
- Structures/arrangement to reduce costs in each sector or supply chain node?
- Smaller scale increases cost per unit
- Can we mimic economies of scale?

Aggregation

- Food hubs are *one* example
 - For-profit or non-profit
 - Single or multiple products
 - Farmer or community focus
- Conventional businesses also function to aggregate, at different places along the supply chain

Strategic Planning

- Within a state or region...
 - Which businesses are critical to expanding food economy?
 - What is the optimal location (geographically) for these businesses?
 - What are the investment opportunities for these ventures?
 - Coordination across state boundaries?



Thank You

