

Producing and Selling Larger Fish

What does it mean?



Processing in Arkansas

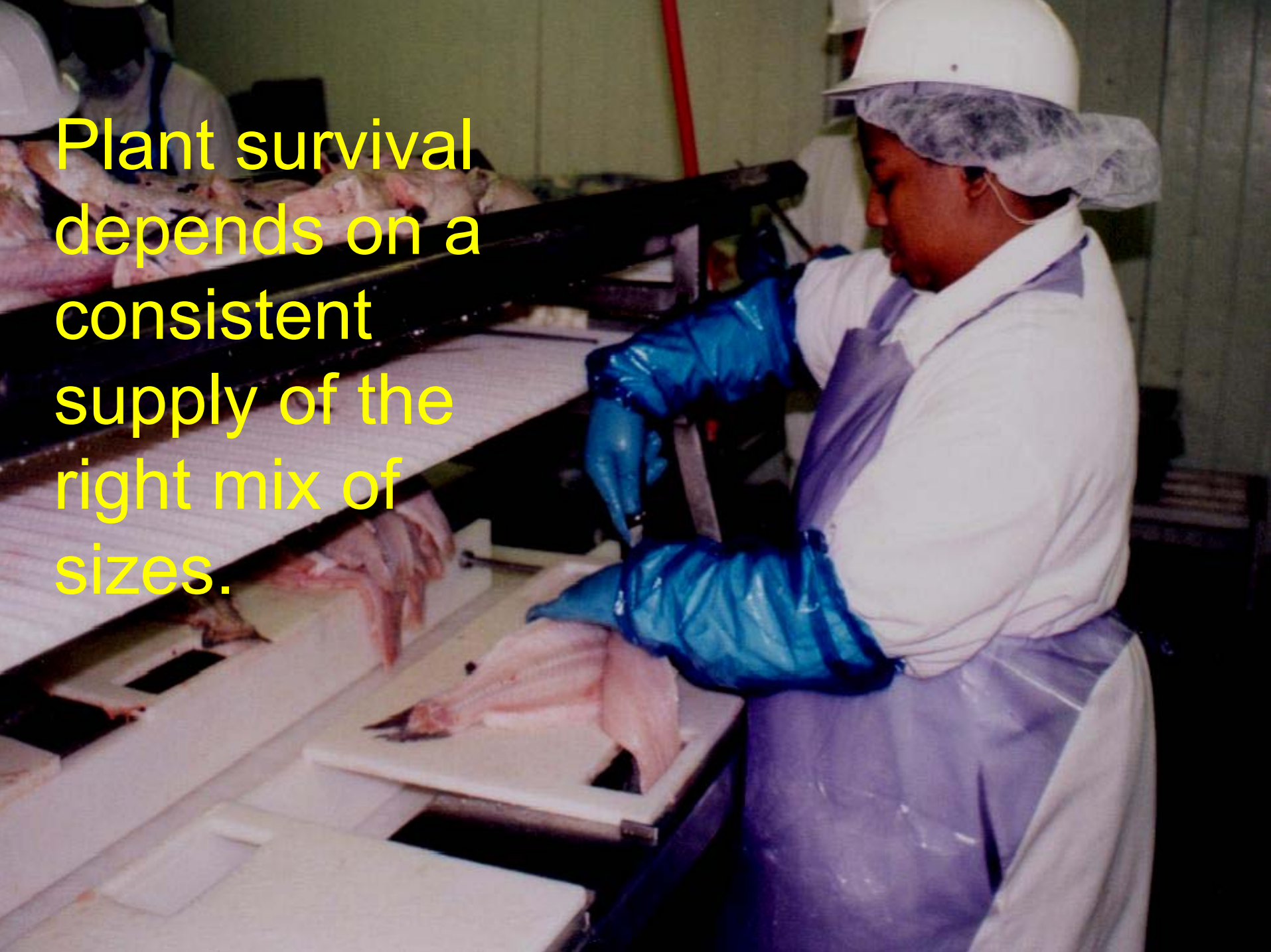


The market continues to change...



....production must follow

Plant survival depends on a consistent supply of the right mix of sizes.



Penalty Structure

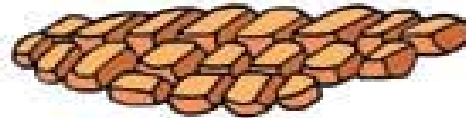
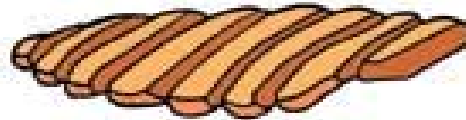
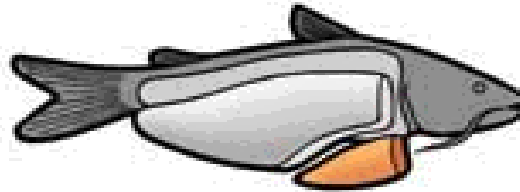
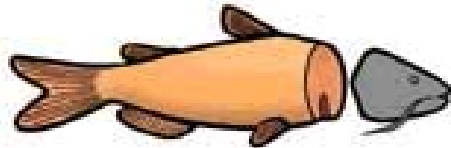
- Before July 12, under 1.00 lb too small
- After July 12, under 1.25 lb too small
- no penalty up to 10% (by wt)
- over 10% = \$0.15/pound penalty



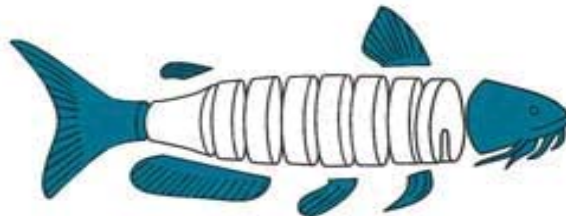
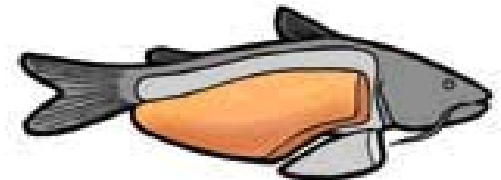
Catfish Product Forms

Nuggets, Strips, Steaks

Whole Dressed Fish



Shank Fillets



Live Weight to Fillet

Fish Weight
(pounds)

Resulting Fillet Size
(ounces)

0.7 to 1

2 to 3

1 to 2

3 to 6

2 to 3

6 to 8

3 to 4

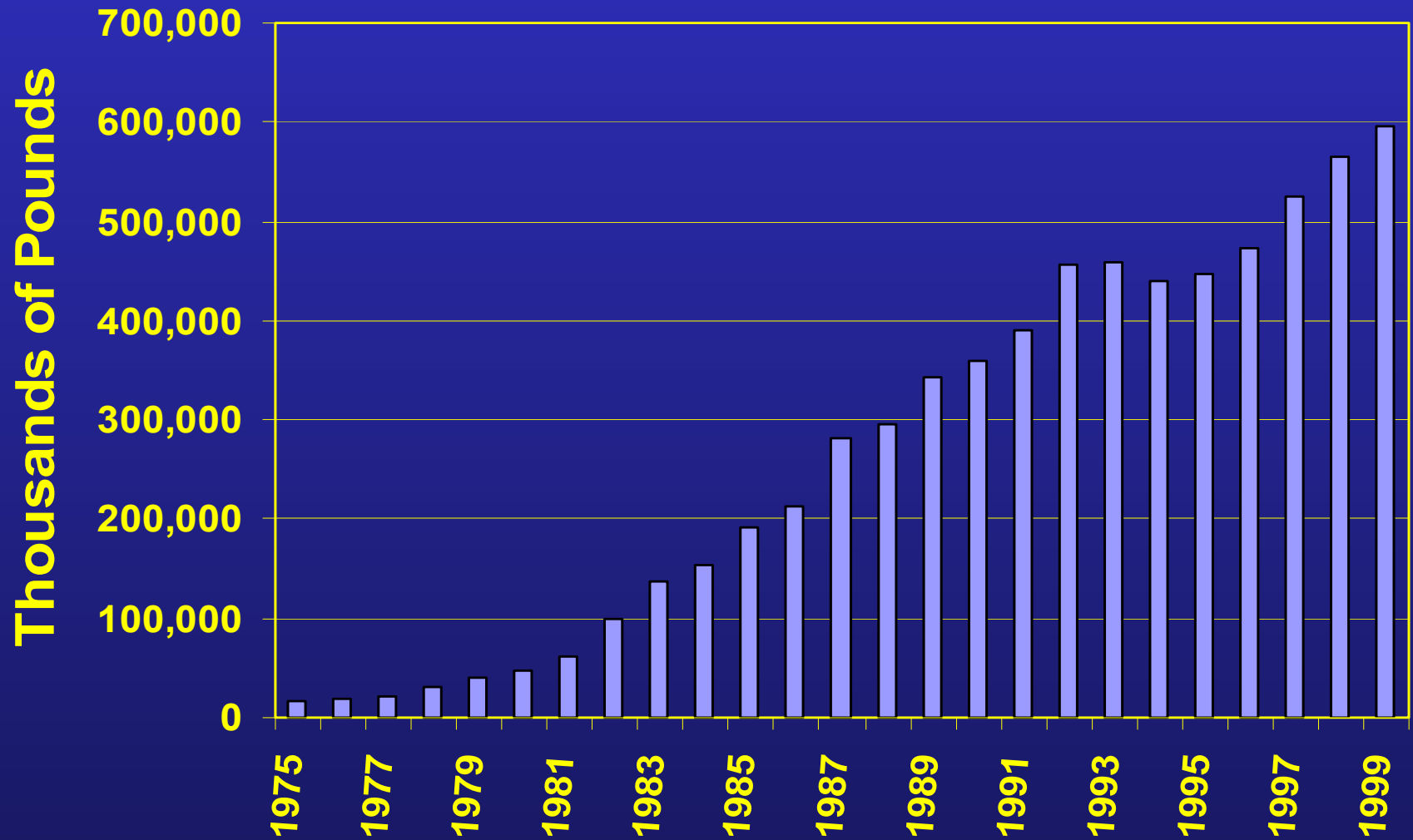
9 to 11

4 to 5

11 to 14

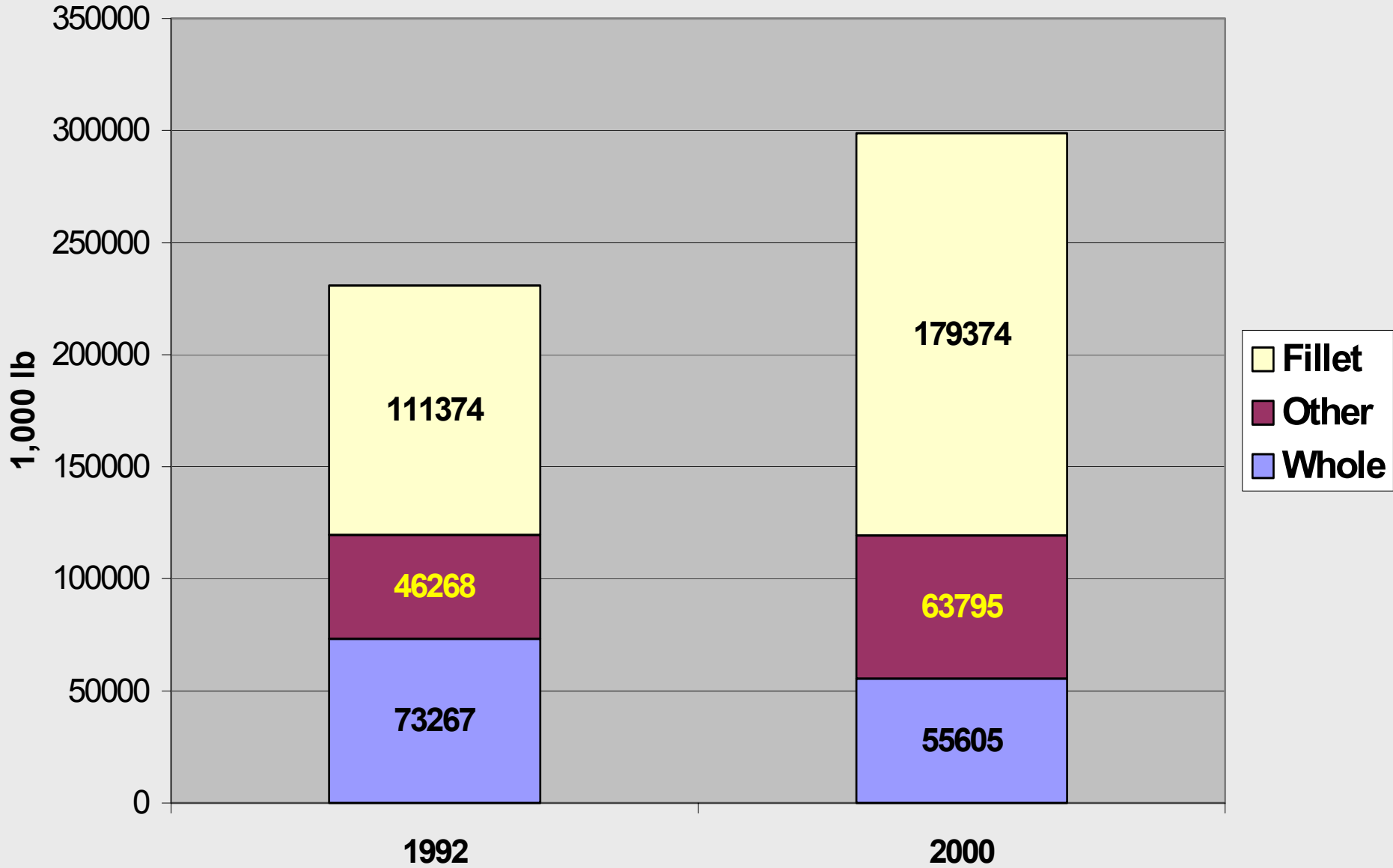
Catfish: Round Weight Processed

1975 - 1999



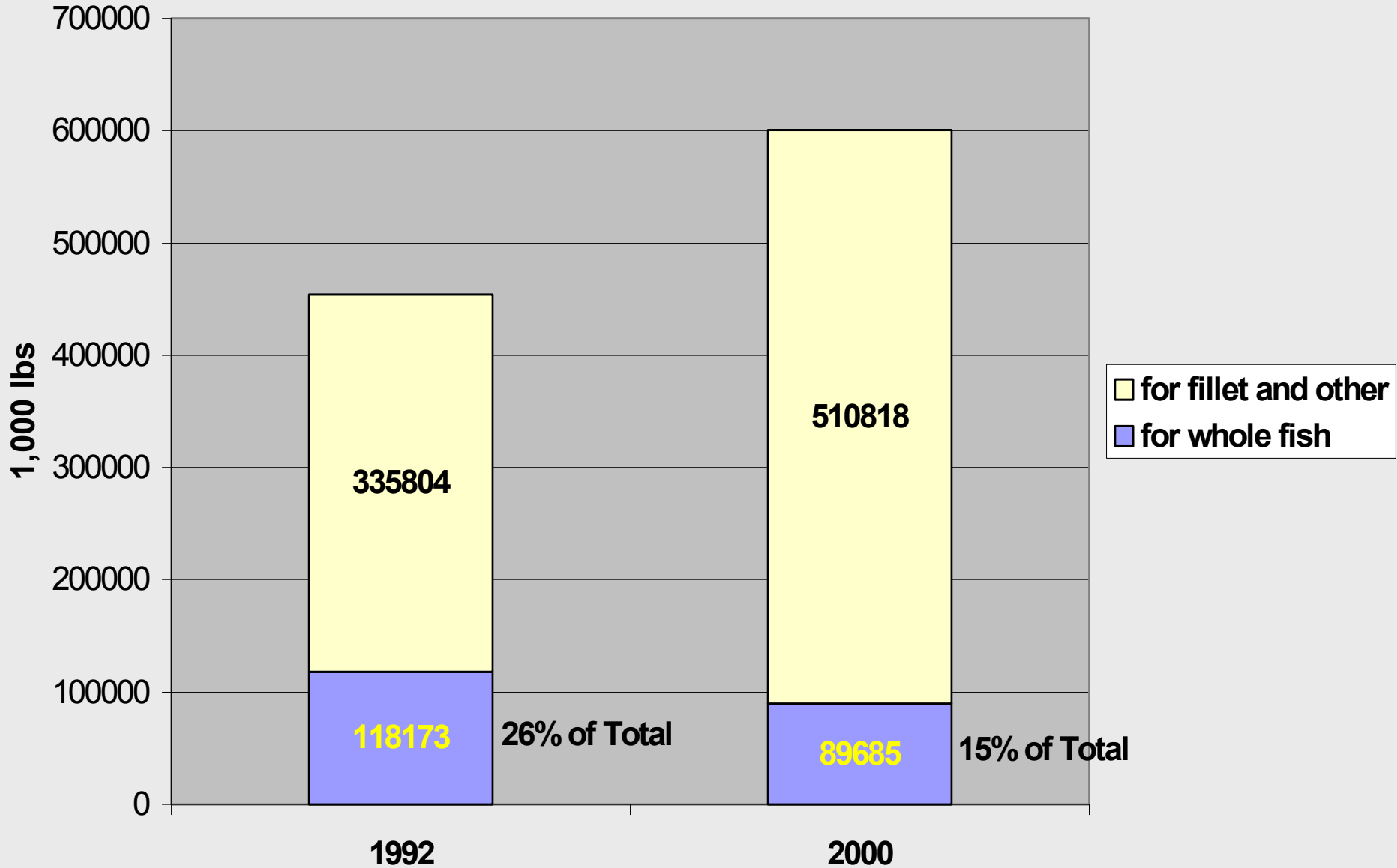
Pounds of Processed Product Sold

NASS, USDA



Pounds of Fish Processed

NASS, USDA



Live Weight to Fillet

Fish Weight
(pounds)

Resulting Fillet Size
(ounces)

0.7 to 1

2 to 3

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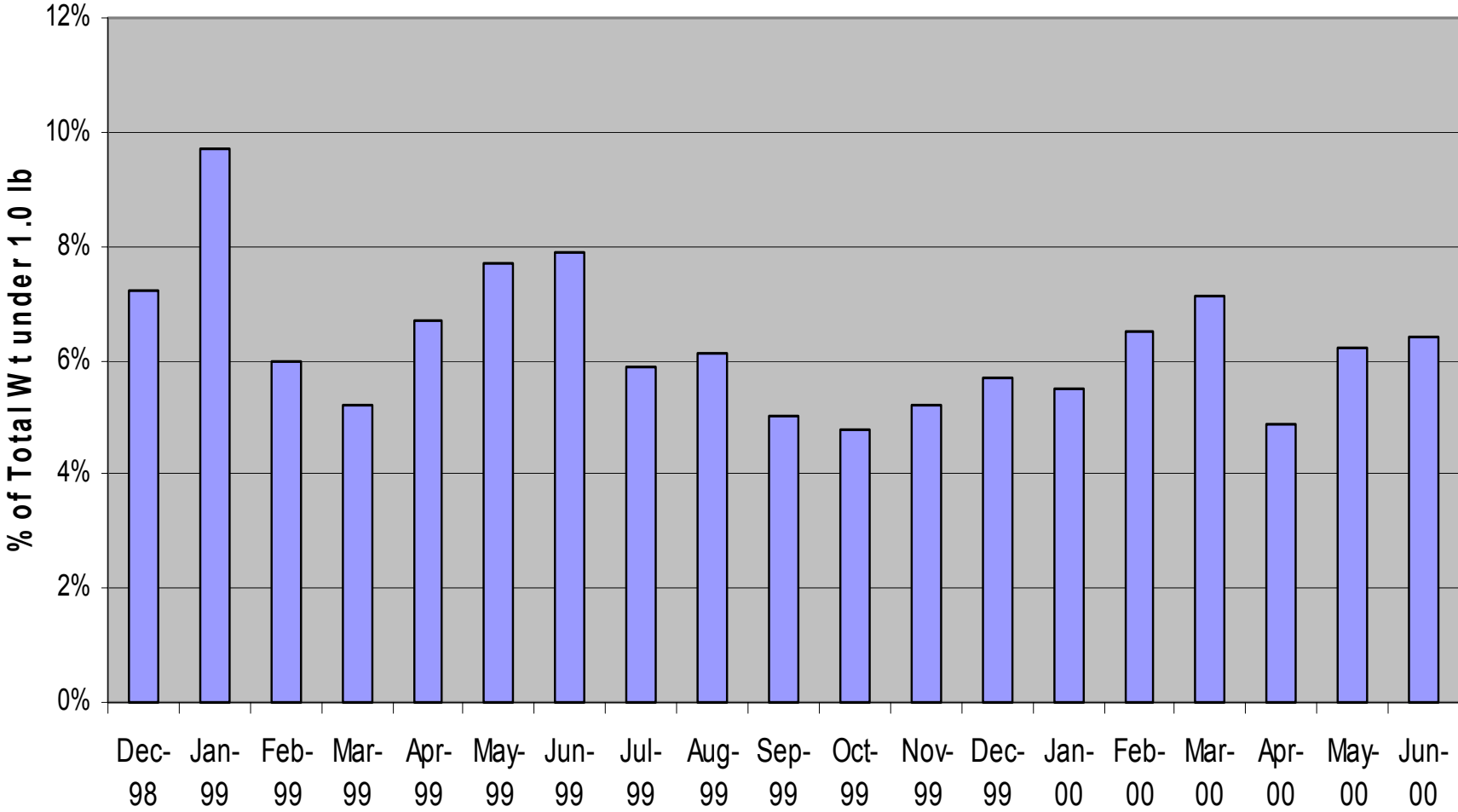
3 to 4

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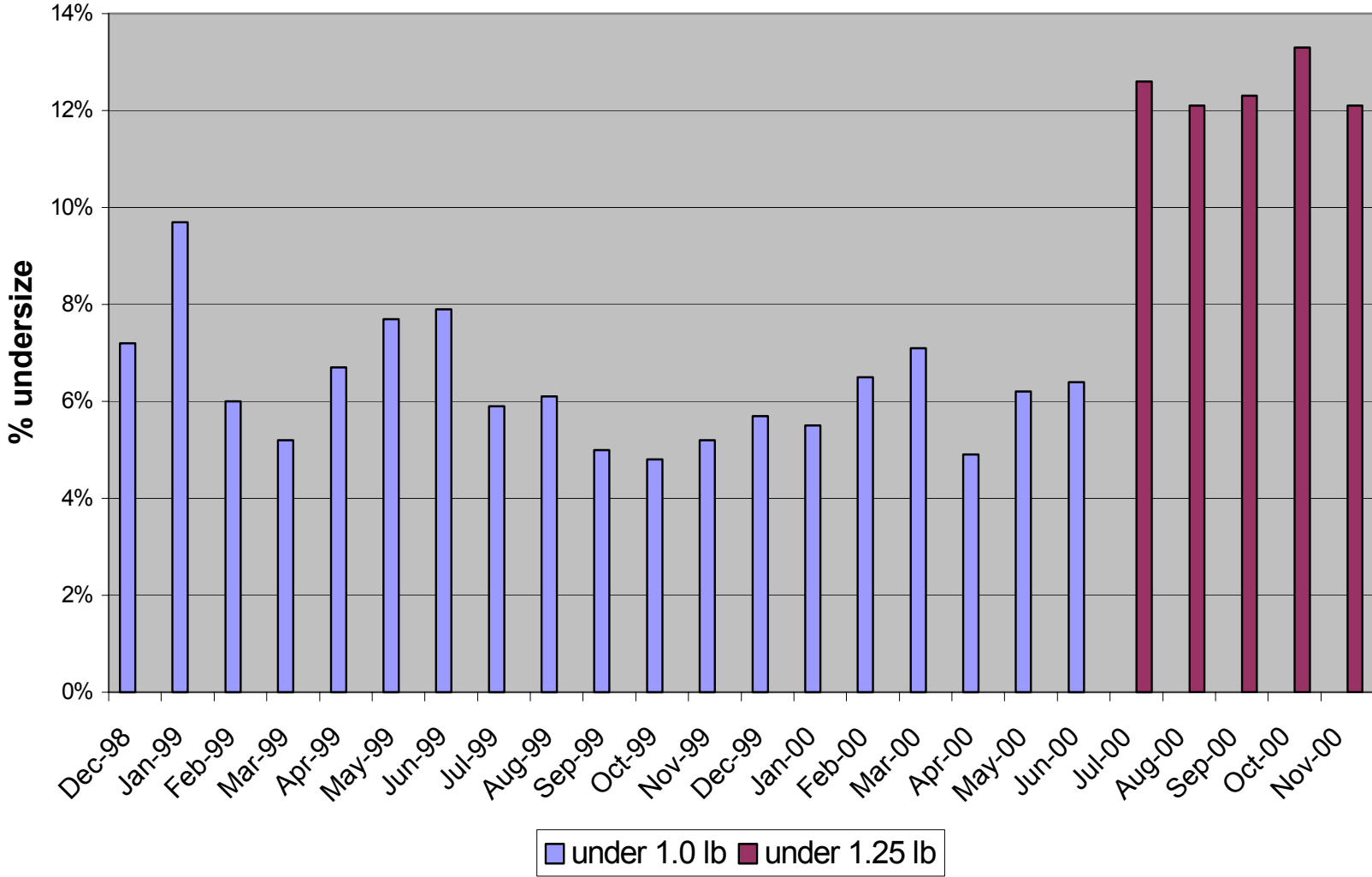
11 to 14

Small Fish Processed
Major Catfish Processor

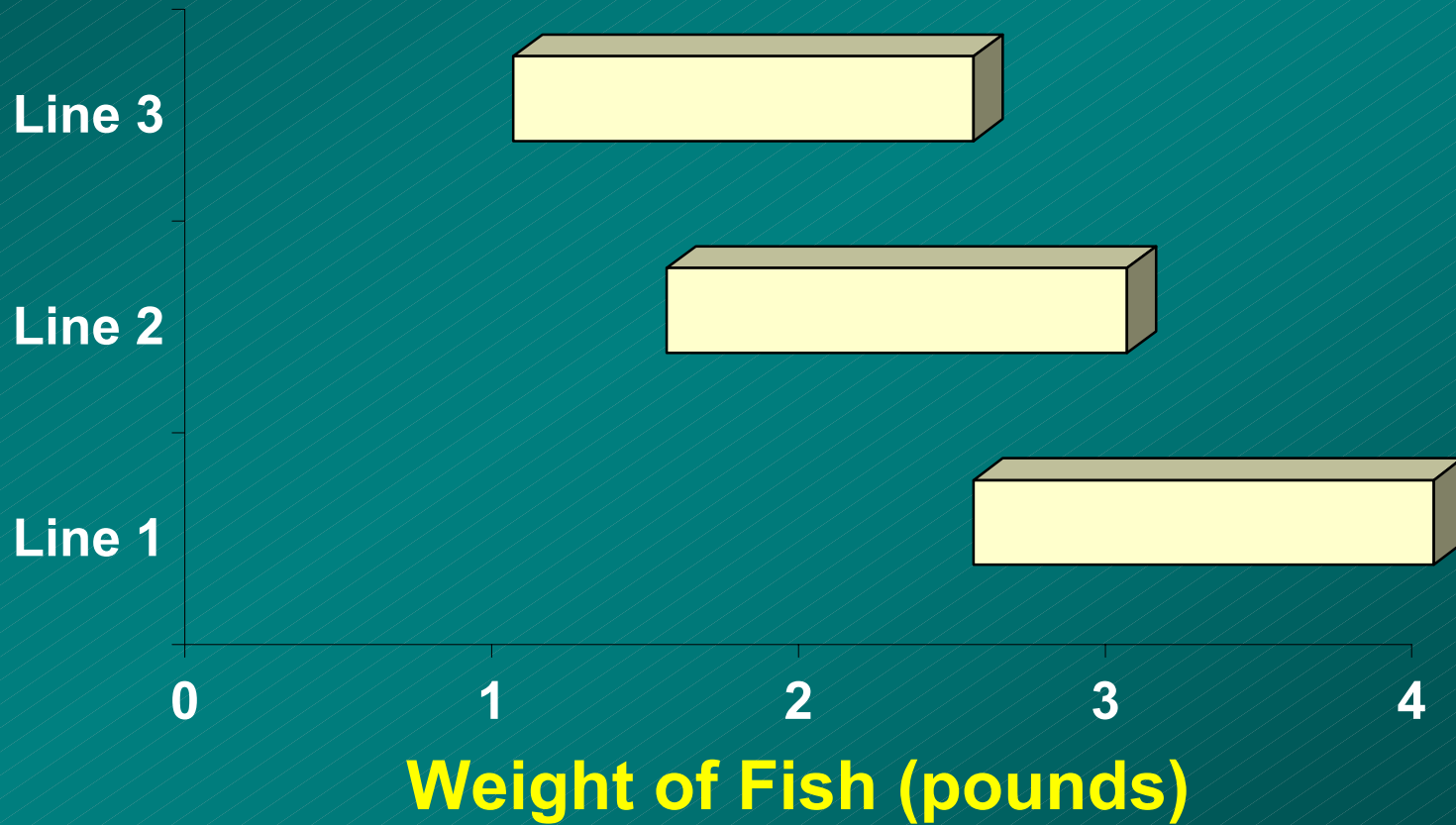


Small Fish Processed

Major Catfish Processor



Size Range for Fillet Machines (Baader 184)



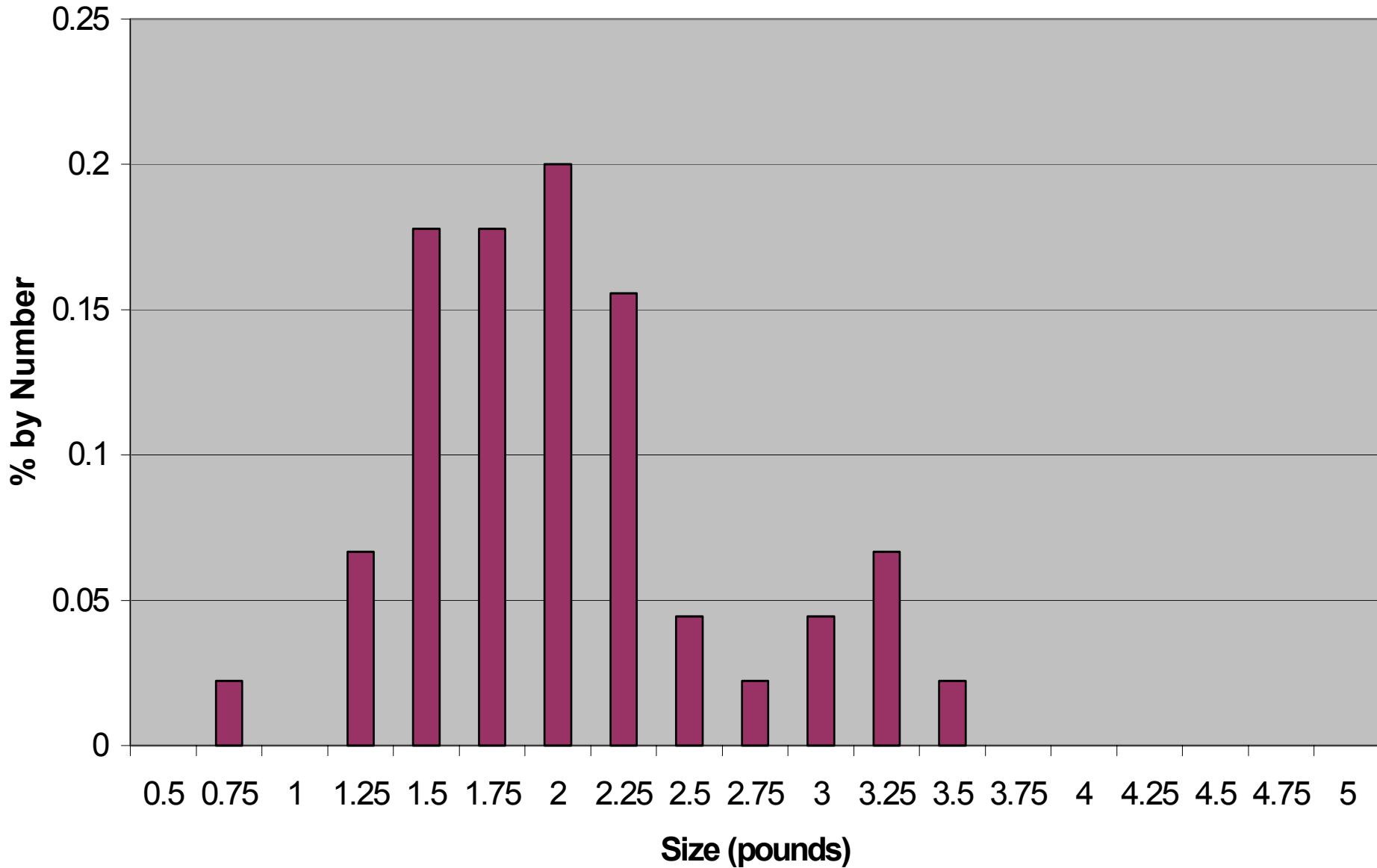
With the **right mix**, a four line plant can efficiently handle **100-120 head/min.**

From 11/28/00 through 1/16/01

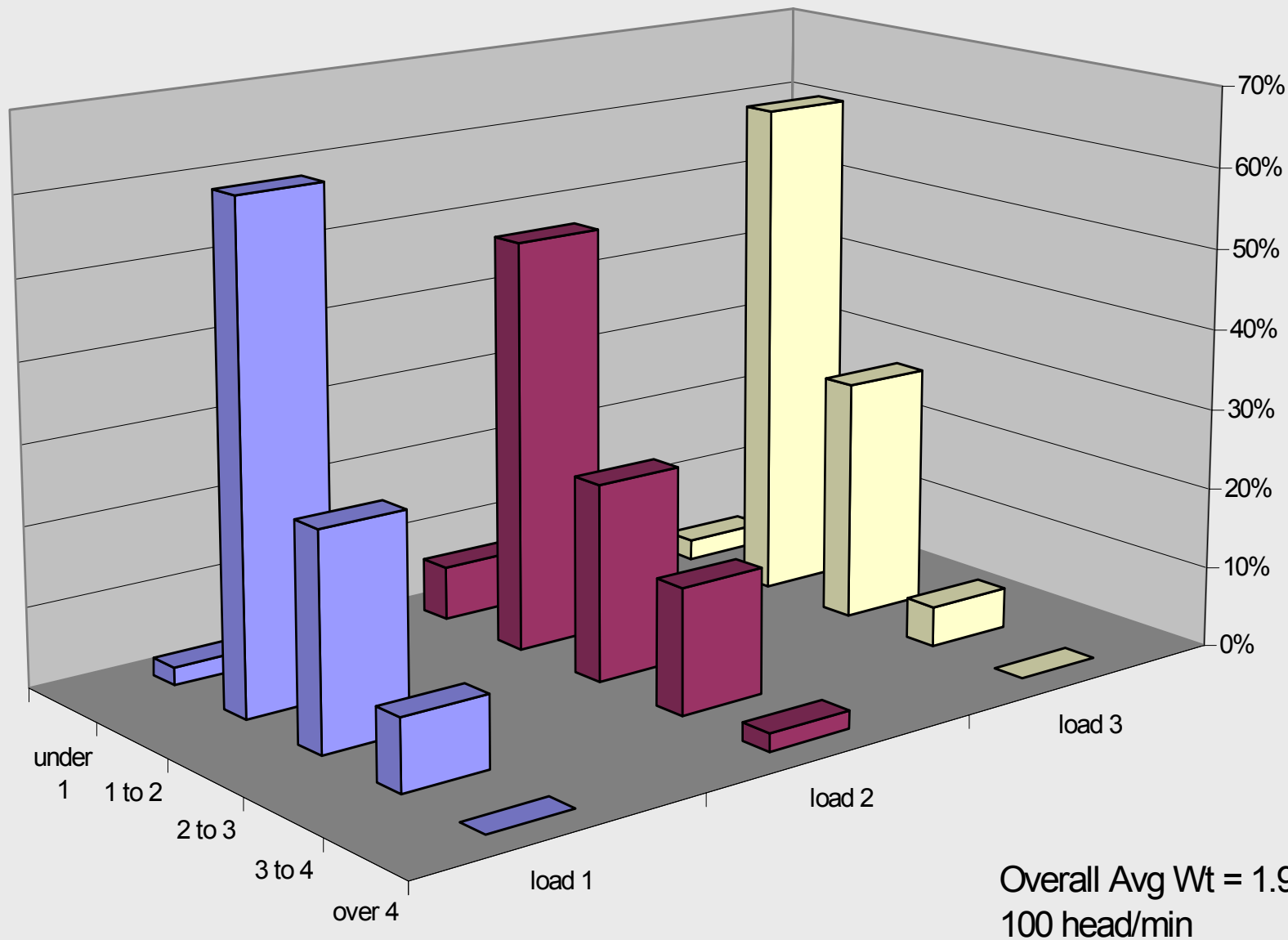
Min:	62 head/min
Max:	100 head/min
Avg:	83 head/min

Size Profile of a Good Load

(Load 1 on November 28)

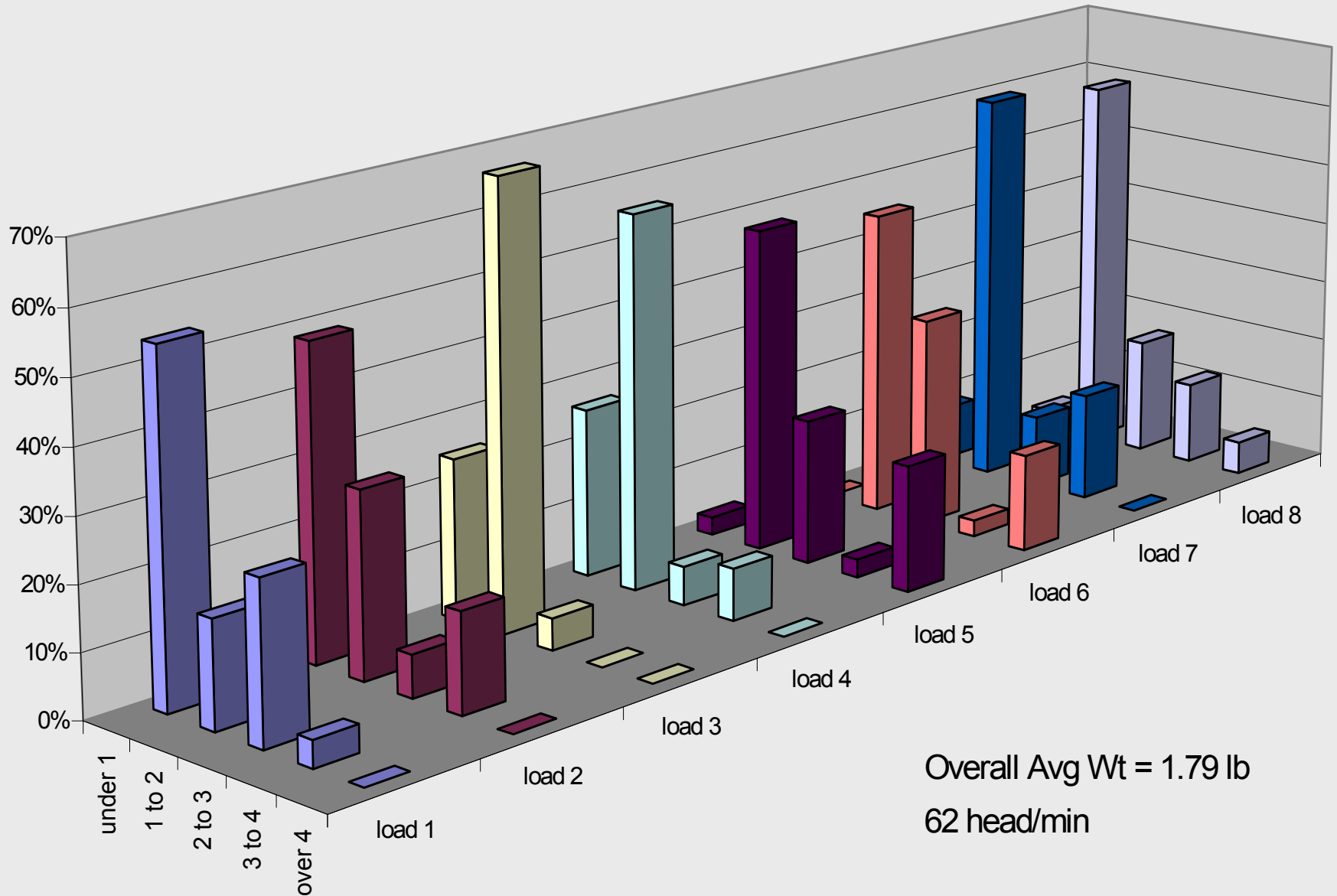


Size Profile (% by number) of First Three Loads Fish Supplied by One Farm on November 28



Size Profile (% by number) of Eight Loads Processed

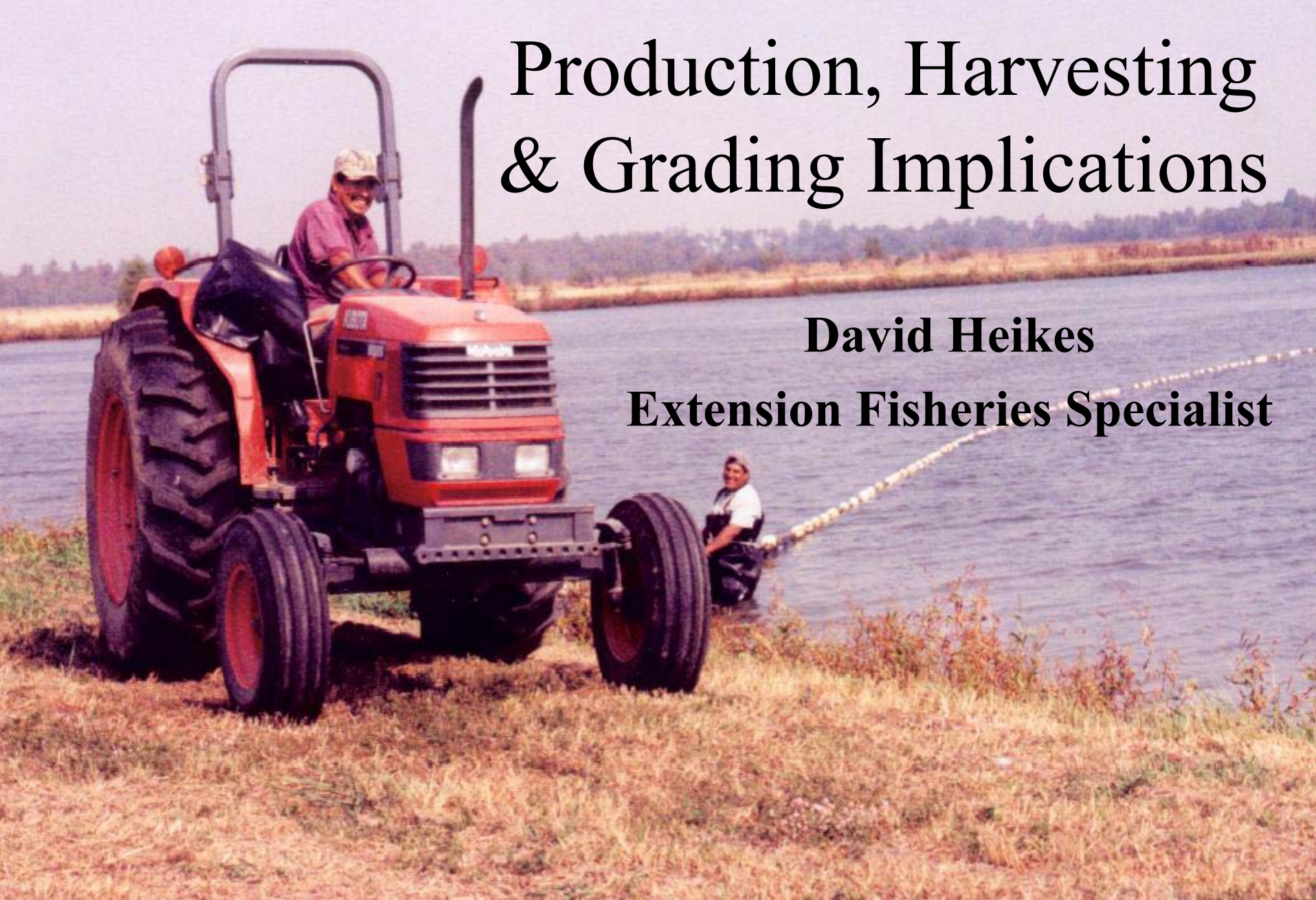
Fish Supplied by Five Farms on Dec. 29



Production, Harvesting & Grading Implications

David Heikes

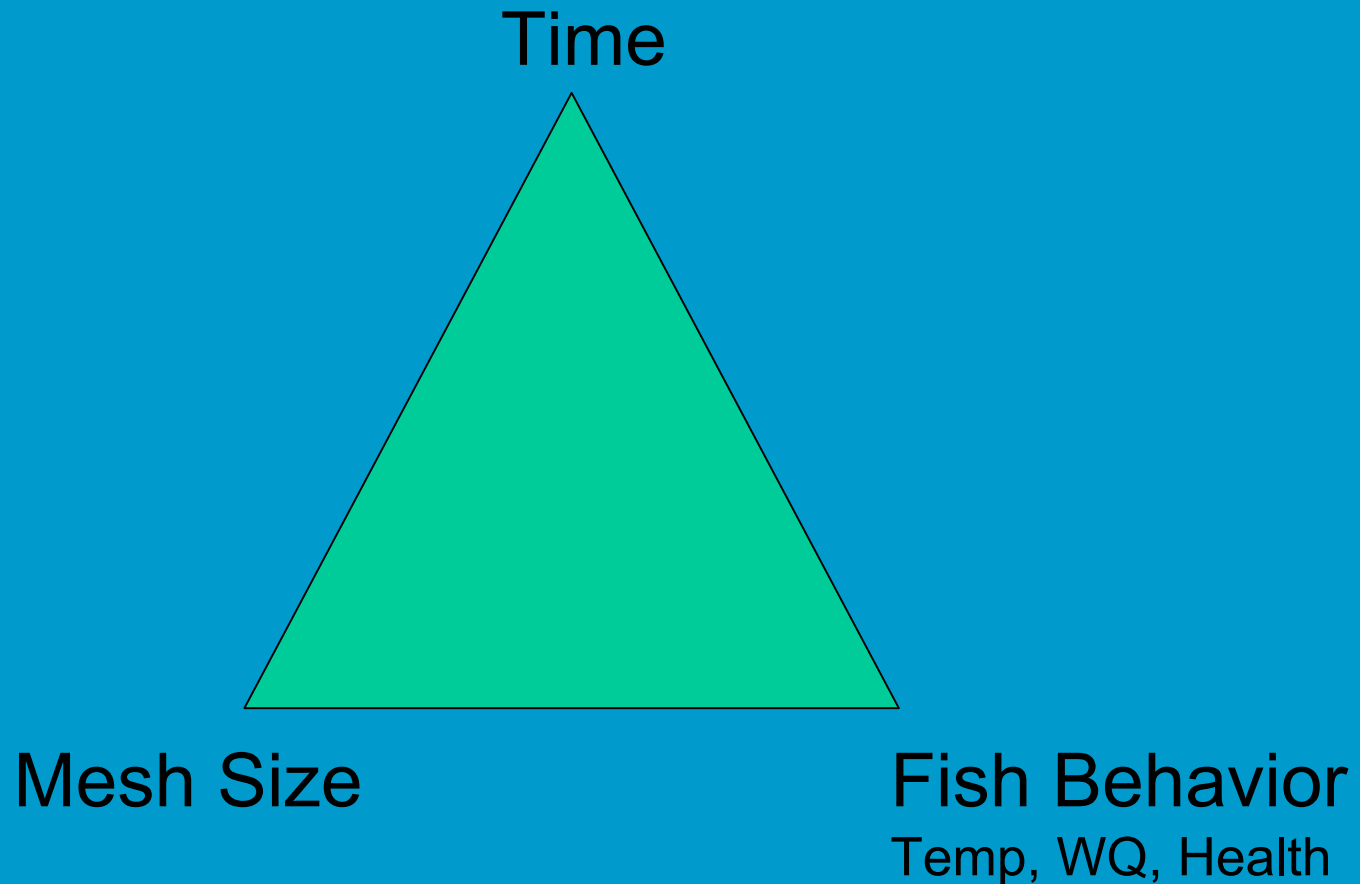
Extension Fisheries Specialist



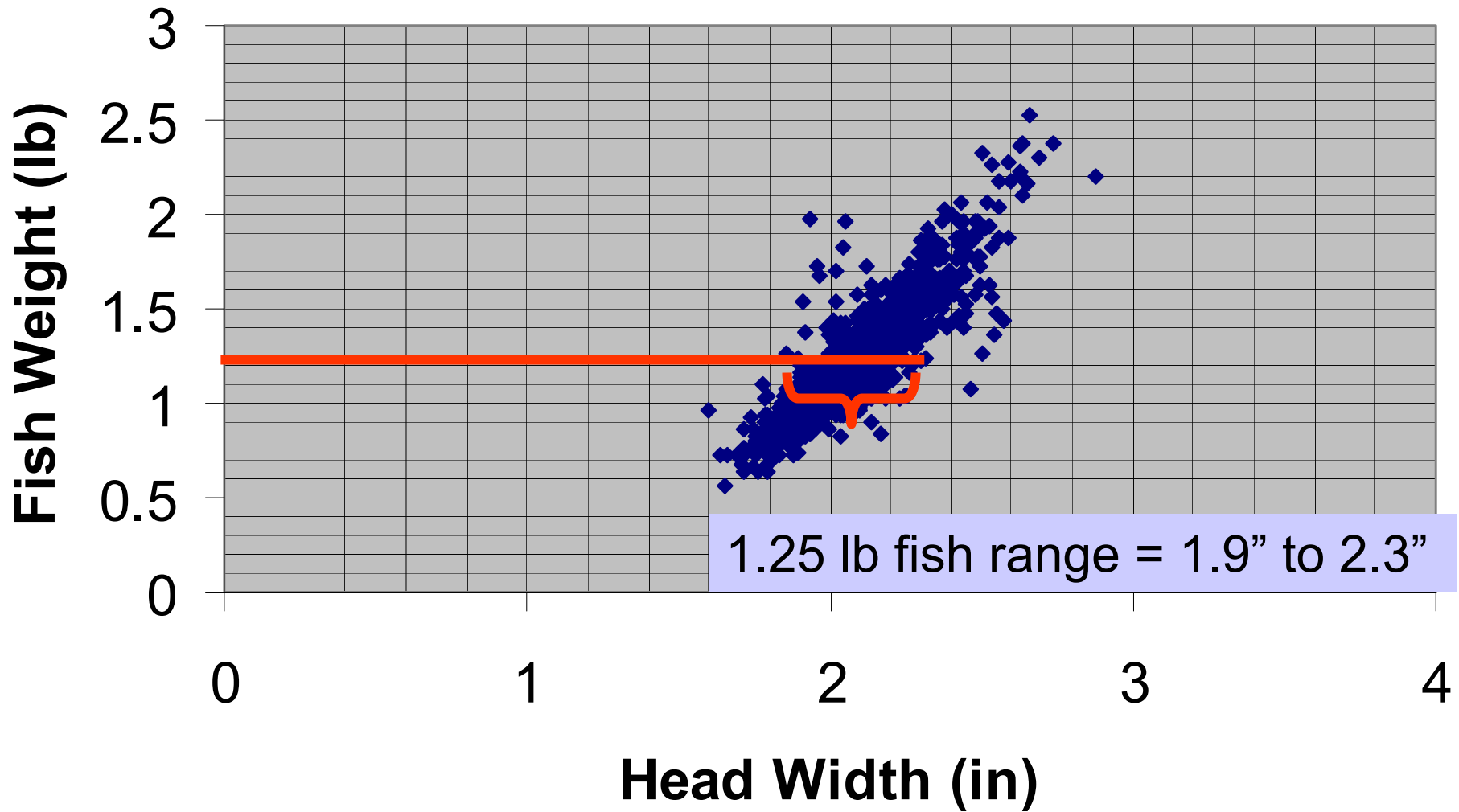
Catfish Grading Chart

Mesh	Holds
1 3/8"	1/2 lb
1 1/2"	3/4 lb
1 5/8"	1 lb
1 3/4"	1 1/2 lb
1 7/8"	1 3/4 lb
2"	2 lb

Fish Grading Factors

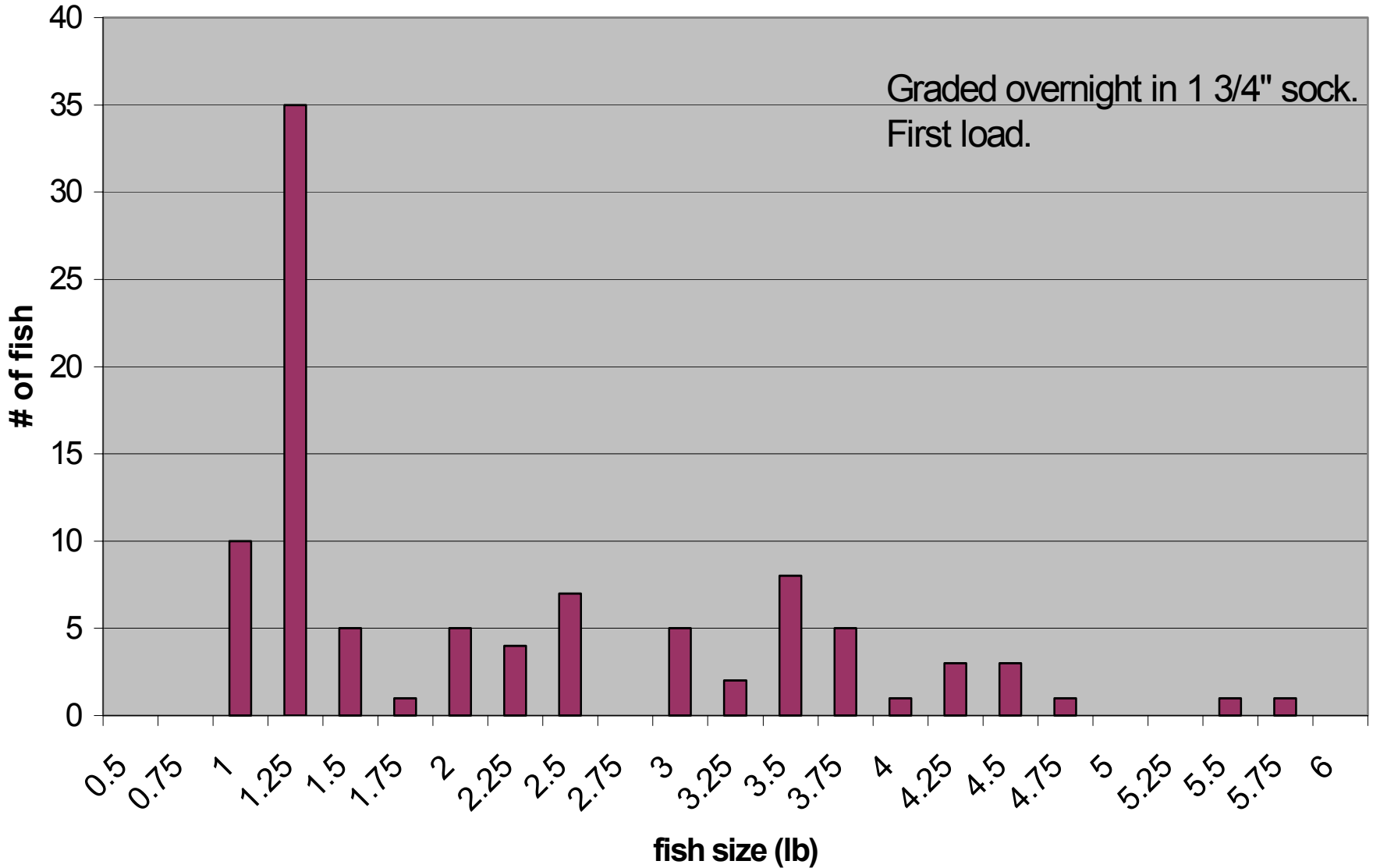


Channel Catfish



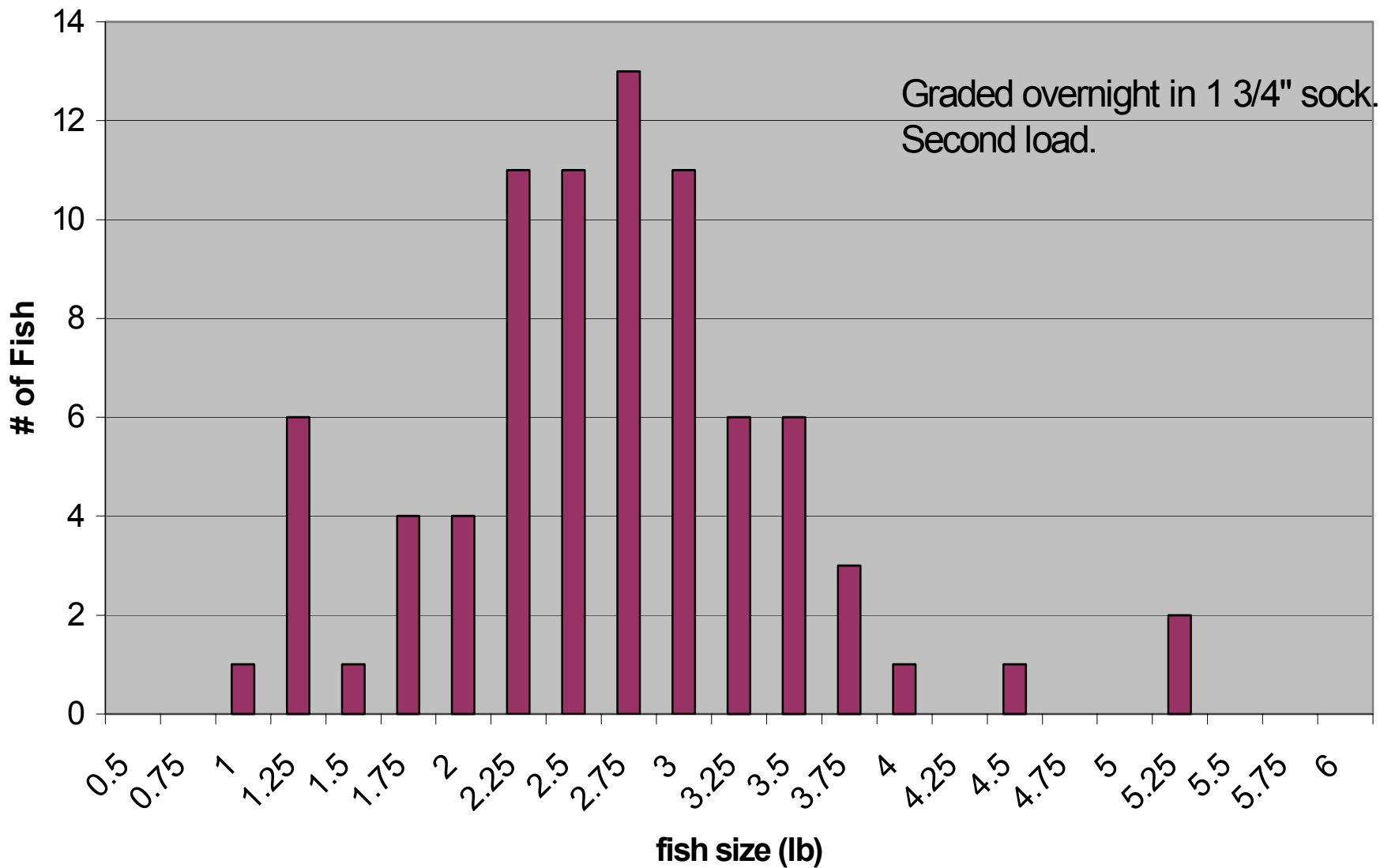
Size Distribution of Harvested Fish

Pond TCII-82, 4/5/00, (14,900 lbs)

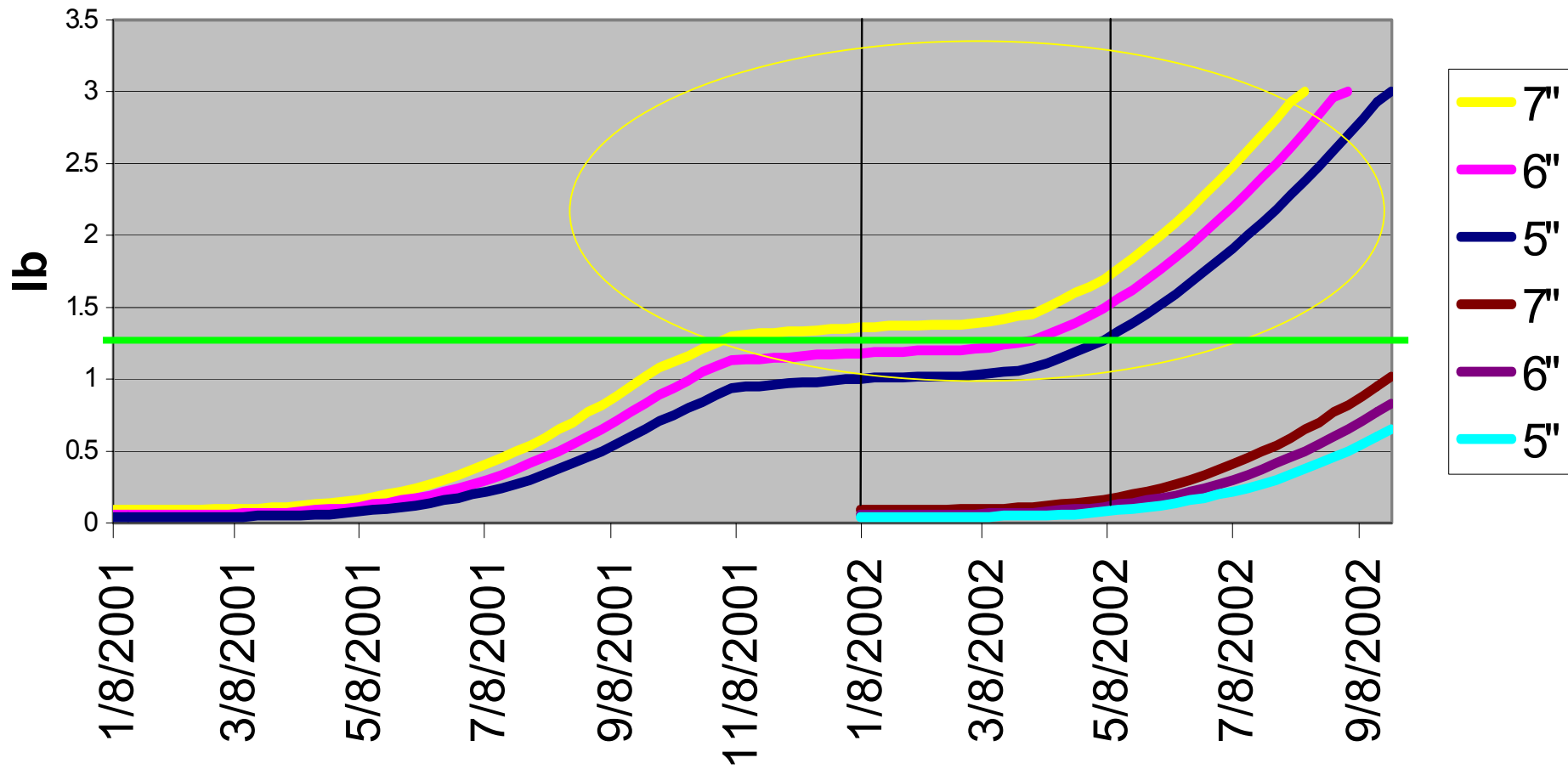


Size Distribution of Harvested Fish

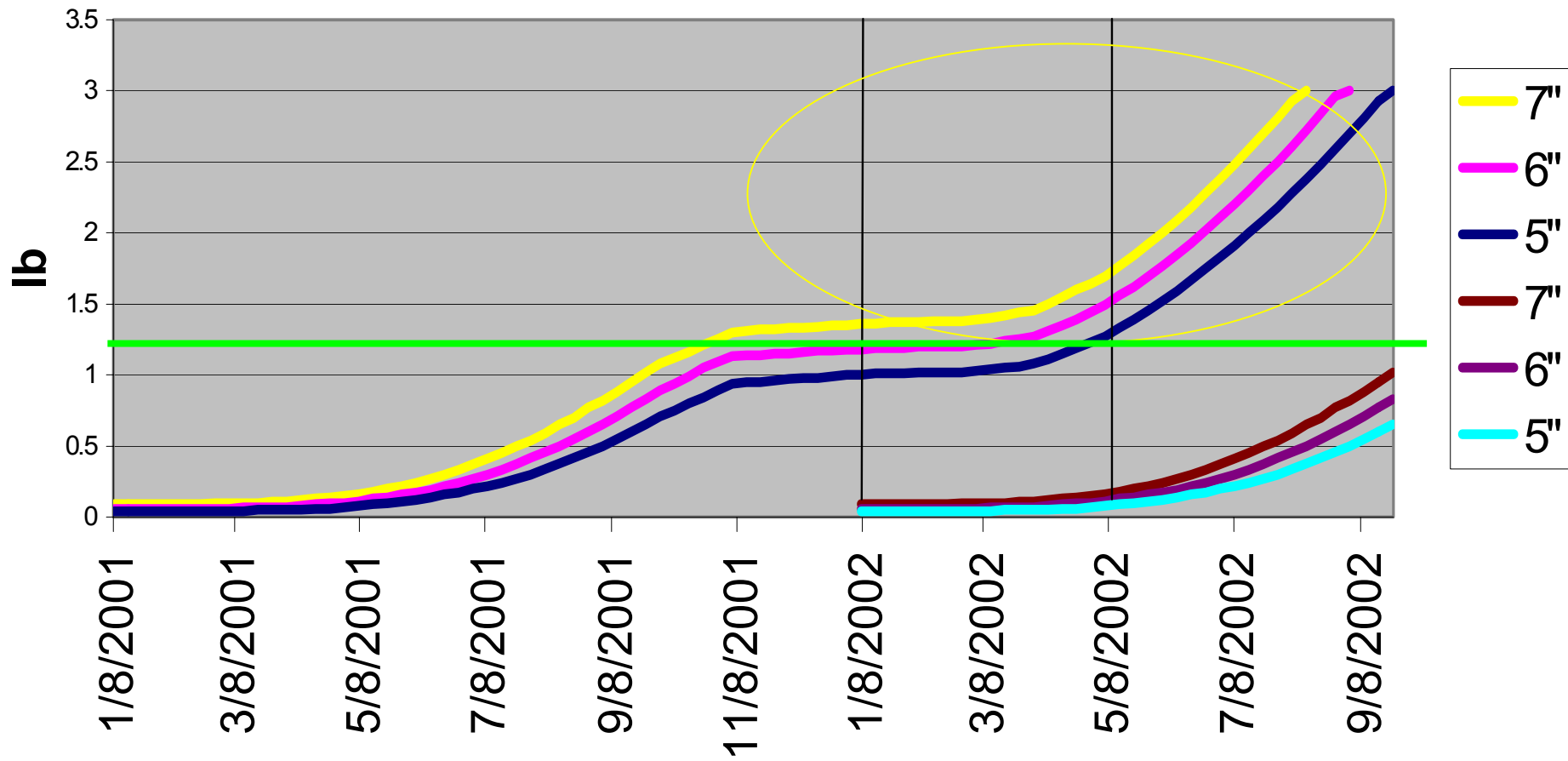
Pond TCII-82, 4/5/00, (3,450 lbs)



Catfish Growth Simulation



Catfish Growth Simulation



In Arkansas...

- Problem **not** seasonal
- Prior to July 12, **6%** under 1.0 lb
- Since July 12, **12%** under 1.25 lb
- Very **limited** market for **small fish**
- Producers need to **supply** what consumers **demand**

A photograph of two fishermen in a body of water. The fisherman on the left is wearing a white cap and dark overalls, looking down at a net. The fisherman on the right is wearing a camouflage hat and a blue shirt, holding a large net full of fish. The water is dark and rippled. The background shows a line of buoys extending into the water.

What to Do???

- Don't stock too heavy
- Keep good records, pay attention
- Don't harvest too soon
- Land fish quickly, minimize stress
- Use appropriate mesh size

Good Seining Technique

Best for catching fish: Seine = 1.5 X Pond Width

Repair nets properly

Dump mud line carefully



Land Fish Quickly



- Use large tunnels
- Mark tops of sock frames
- Mark bottom corners of seine tunnels
- Make sure ropes and frames are in good repair
- New Zipper Technology?

Place Aerators Properly

Pull, don't Push water through net!



**New Research to be Funded
by
Catfish Promotion Board**

**“Least-Cost Production
Strategies to Produce Fish
Harvestable with 1 7/8 in Mesh.”**

Grading Foodfish with In-Pond Grader



Foodfish Grading Trials

Summary of four ponds, 3/22-26/03

	Before Grading	Sent to Plant	Returned to Pond
LBS	51,767	24,825	26,941
HEAD	43,237	11,463	31,774
AVG WT	1.20	2.17	0.85