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PRACTICAL INFORMATION ON LIGHTING

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The fact that lighting programs are a critical component of poultry management is well understood. However, the terminology associated with such programs is not always as easy to utilize.

What are some of the common terms used, and what do they mean?

• Candela — the unit of luminous intensity of a light source in a specified direction.

• Lumen — the rate at which light falls on a square foot area surface which is equally distant 1 foot from a source whose intensity is 1 candela.

• Lux — equals 1 lumen per square meter (10.7 lux = 1

footcandle).

• Lumen efficiency — the amount of electricity necessary to light a bulb in watts. The number of lumens per watt of bulb is an indicator of the efficiency of the light source. The rule of thumb is that 1 watt produces 12.60 lumens of light.

• Footcandle — illumination on a surface is measured in footcandles. This is defined as the density of light striking each and every point on a surface within a 1-foot radius with a 1 candle power source at the center.

• Available lumens — not all light is available — many of the lumens are absorbed by the walls, ceiling, and equipment (30 percent). Dirty bulbs and dusty or cloudy conditions may also reduce the available lumens so that the average is approximately 50 percent.

To illustrate by example, consider that 1 watt = 12.60 lumens x

50 percent = 6.3 lumens/watt. Now, calculate footcandles: (1) 60 watt bulb x 12.60 lumens = 756 lumens x (50 percent) = 378 lumens of light available. If this amount of light was spread evenly over 240 square feet (which normally does not happen) then 378/240 = 1.58 footcandle per square foot.

General management guidelines:

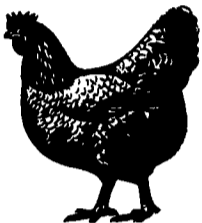
- Use reflectors when possible.
- Clean bulbs every 2 weeks. Dirty bulbs can significantly reduce light intensity.

- Distribution of bulbs — follow a 1-1.5 ratio. The distance between bulbs should be 1.5 times the distance from the bulb to the bird level.

- Always use a light meter to obtain accurate measurements of in-house light conditions.

Also remember that the environment (temperature), physical requirements of the lamps (line voltage), and light distribution can and will affect the lighting program selected for your operation.

Evaluate your individual housing situations and consider all factors when deciding on the type of light source and the lighting program for your operation.



Sheep President Spells Out Year Of Challenge

ORLANDO, Fla.— Playing off the convention theme of "Building Bridges," American Sheep Industry Association President Jim Magagna said 1991 was a year of "creative solutions setting some unprecedented opportunities for the future. It was our beginning of building bridges," he told the board of directors during ASI's annual meeting here recently.

Magagna drew some parallels between the issues of 1991, his first year as ASI president, and the challenges expected in 1992.

"The coalitions we are building with other industries and organizations on the endangered species issue will make it workable for our industry in the upcoming debate," he said. "It will set the stage to move forward in building public policy to stabilize public lands and grazing policy."

Magagna pointed to work with other industry groups like the Sheep Industry Development program, saying the industry is prepared to move forward together to create programs to benefit all sheep producers.

In the wool area, Magagna talked about the efforts in interna-

tional marketing and wool quality improvement. "We have created a niche in the international market for U.S. wool," he said. "We will build an integrated effort for marketing opportunities with our products."

The lamb market "drew a tremendous effort from the entire industry in 1992," he said. "We are building a foundation on which we can build and move forward." The results include moves toward value-based marketing tools such as quality and yield grading and price discovery, he said. "Information and quality will be a base on which we can build a future for our industry," Magagna said.

"Our industry has an image to be proud of," he said, pointing out new materials developed to tell consumers about the quality and wholesomeness of lamb and wool, and the environmental benefits of sheep production.

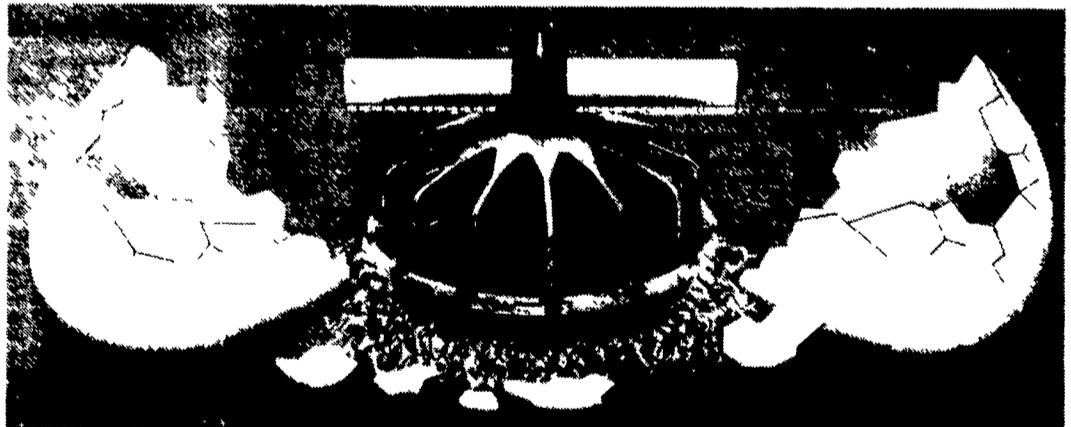
He called on the board to be innovative and progressive in looking at the association and in creating its vision for the future. He said funding will be a continuing issue for the industry.



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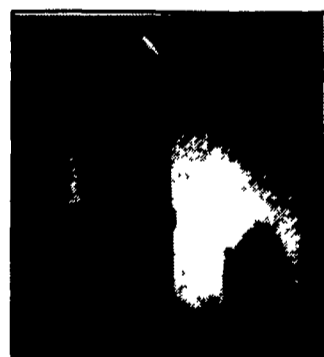


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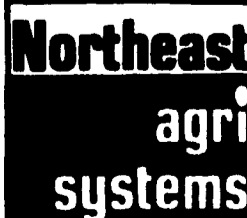


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