



Almond Sustainability Program: Getting Credit

Gabriele Ludwig, Moderator



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Almond Sustainability Program: Getting Credit

Presenters:

Dan Sonke, SureHarvest

Almond Grower Participants



California Almond Sustainability Program

Gabriele Ludwig, ABC & Dan Sonke, SureHarvest





How To Play Our Game

• SAMPLE QUESTION

Q. Almonds grow...

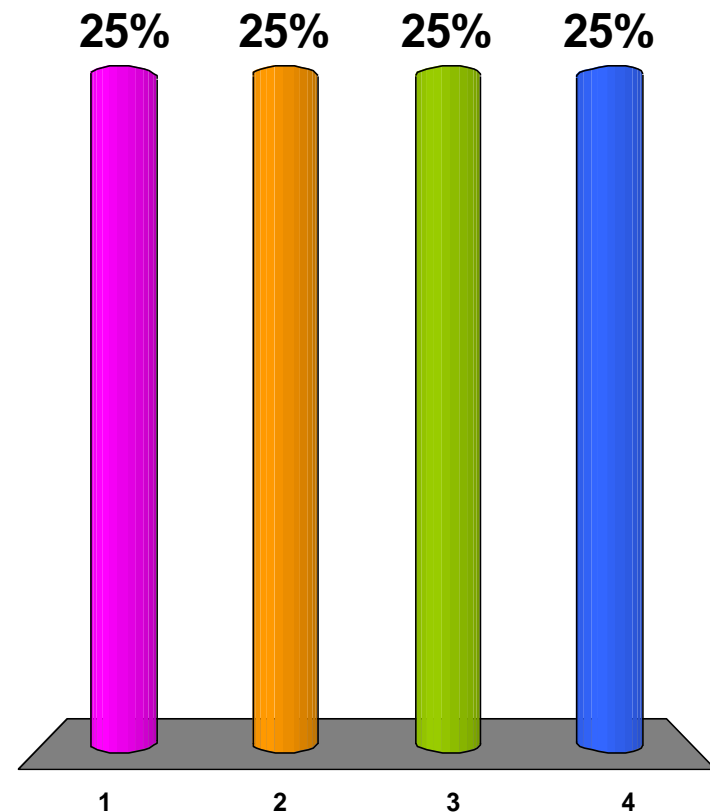
- 1. On vines and fruit underground**
- 2. In every state of the US**
- 3. Hydroponically in greenhouses**
- 4. On trees in the Central Valley of California**





Almonds Grow...

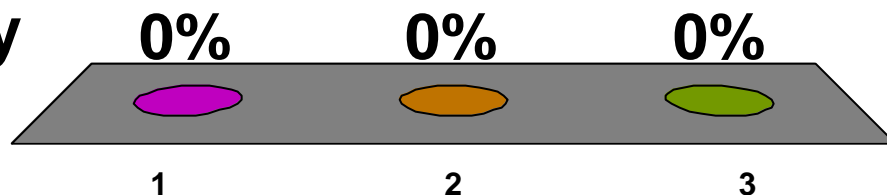
1. On vines and fruit underground
2. In every state of the US
3. Hydroponically in greenhouses
4. On trees in the Central Valley of California





What is Sustainable Almond Farming?

1. Only organic almond farming
2. Only almonds grown within 100 miles of where they are eaten
3. Almond growing that considers the long-term economics as well as impacts to the environment and society





Sustainable Almond Farming



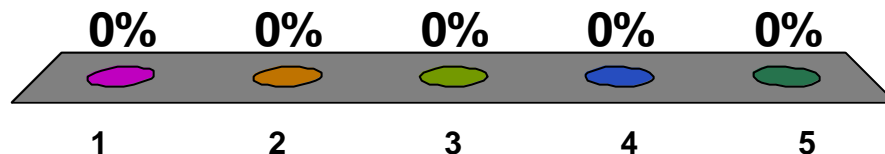
Almond Definition:

- Sustainable almond farming utilizes production practices that are economically viable and are based upon scientific research, common sense & a respect for the environment, neighbors & employees. The result is a plentiful, healthy & safe food product.



The Primary Driver of Sustainable Agriculture Programs Today is...

1. **Michelle Obama**
2. **Hippie communes**
3. **Natural food store shoppers**
4. **Socialist Environmentalists**
5. **Mainstream food companies like Wal-Mart, Nestle, General Mills, Unilever**



KRAFT **Kraft Foods**

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Responsibility

Overview

Agricultural Supply Base

Improving Sustainability of Our Agricultural Supply Base

At Kraft, we think that responsible corporate citizenship is good for our business as well as the right thing to do. We have important responsibilities for those aspects of our business that we directly control, but we also share a strong interest in the success and well-being of those that are part of the agricultural supply base for our company. Kraft relies on independent farmers around the world for quality agricultural products, so working cooperatively with others to encourage the long-term stability of our agricultural supply base is necessary for our own continued business success.

News & Information

10/20/2006
[Ethiopian Coffee Farmers Lead the Way with First Rainforest Alliance Certification in Africa](#)

10/17/2006
[The Rainforest Alliance Announces Project to Help Cocoa Farmers in Africa](#)

10/4/2006
["Healthy Communities" Program Expands Work to Improve Life for Cocoa Farm Families](#)

03/15/2006
[Yuban Becomes Largest Branded Supporter of Rainforest Alliance Certified Coffee](#)

What Is Sustainability?

In 2005, we purchased about \$7.7 billion worth of commodities. Our company is one of the world's largest purchasers of several agricultural commodities, including such varied products as coffee, cocoa and select nuts. Some of our important commodities are sourced primarily from developing countries, which face special challenges with regard to sustainability.

We recognize that agriculture can have significant and lasting environmental and social impacts. Understanding and constructively addressing these impacts requires effort and cooperation from:

- Producers (including farmers, cooperatives and post-harvest processors)
- Food industry

WAL-MART

Home > Environment

Our Company People Community Environment

Search: Entire Site For: Go

CONSERVE ENERGY AND RESOURCE REQUIRED TO OPERATE A STORE
REDUCE RAW MATERIALS NEEDED FOR CONSTRUCTION
USE RENEWABLE MATERIALS USED THROUGHOUT THE FACILITY

One of our toughest challenges as a retailer is determining how to continue to create value for our customers while minimizing our footprint on the environment.

The scope and scale of our business presents great potential to effect positive change around the world. Environmental leadership is critical to our future ability to grow and thrive as a company.

Focusing on the environment is key to our mission to improve the quality of life for people around the world. Environmental leadership is critical to our future ability to grow and thrive as a company.

Directory
Find out why we're committed to protecting our environment, and how it actually makes good business sense.

Features

The Green Machine
Recently, Fortune magazine published an article about Wal-Mart, highlighting our environmental and business sustainability efforts.
[Read more](#)

Kids Recycling Challenge
Students collect their plastic bag through out the year and bring them to the local Wal-Mart stores to recycle.
[Read more](#)

Ethical Standards Program

Sustainable Value Networks
Our networks encourage communication across departments, companies and countries to capture a wealth of knowledge and apply it to our business.

Recent Activities
Extraordinary new forces are aligning around our global environmental challenges, all over the world. When combined, they present a surprising view of the future.

Starting the Journey
Take a tour of the Wal-Mart supply chain and see how we're taking our first steps towards sustainability now. [Read more](#)

Did you know?

- Our experimental store in McKinney uses solar power to help meet its energy needs.
- We developed an innovative system for recycling plastic bags. The "sandwich bale" has enabled us to divert 1,100 tons of plastic from landfills so far.
- We helped one of our suppliers reduce the packaging on one of their popular toys. As a result, we were able to distribute it using 230 fewer shipping containers, so we saved 356 barrels of oil and 1300 trees.

[Visit WalMartfacts.com](#)

Featured Video

Unilever

Our brands Our values Our company

Home > Our values > Environment & society > Sustainable development report

Sustainable development report

This report presents an update on our progress in 2006 in managing our social, environmental and economic impacts.

About this report

Here we show how we are living out our commitment to responsible business practice in the communities where we operate around the world. The report starts by focusing on issues where we have the biggest impact. These include:

Nutrition & hygiene
The social impact of our products on people's health.

- Nutrition
- Hygiene

Integrating sustainability
How we secure sustainable supplies of raw materials.

- Integrating sustainability
- Agriculture

Environmental footprint
Reducing our footprint and addressing the climate change challenge.

- Environmental footprint
- Climate change

Creating & sharing wealth
The wealth our operations create and how it benefits stakeholders and local communities.

- Creating & sharing wealth

HERSHEY'S **NYSE:HSY**

HOME ABOUT THE HERSHEY COMPANY INVESTOR RELATIONS NEWSROOM BUSINESS CUSTOMERS MAKING A DIFFERENCE CAREERS CONTACT US

The Hershey Company

Investor Relations

- Annual Report
- SEC Filings
- More in Investor Relations ...

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- Food Service
- Vending
- Fund Raising
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- More in Business Customers ...

Information For ...

- Investors, Shareholders & Analysts
- Business Customers
- Businesses / Press
- Students & Teachers
- Prospective Employees

Response Cocoa Growing

Latest News

Sodexo

Corporate Responsibility

People Healthy Living Environment Hunger Community Corporate Responsibility Report

Sodexo: Our Commitment to Responsible Leadership

The people of Sodexo touch the lives of millions of men, women and children each day. Our customers range from college faculty and students to children entering school for the first time; medical professionals and hospital staff to patients and their families; corporate executives to company employees of every job description. People from every walk of life cross North America.

Regardless of the background, occupation or personal needs of our customers, our commitment goes well beyond the services we provide. Our mission is to improve the quality of daily life for all the people we serve. Being socially responsible is central to this commitment and the reason why we have become the first company in our industry to endorse the **Global Sullivan Principles of Social Responsibility**. Each year we publish a full report on our progress. [click here to learn more.](#)

We strive to be the type of company and help to create the type of world we want for tomorrow. As a leading provider of outsourced food and facilities management services throughout North America, we're committed to continuing to lead our industry in helping to address the challenges that are impacting our communities.

Sodexo USA's Supplier Code of Conduct

MARS

Home Who we are Commitment

Commitment

Find out what we believe and how we operate as a business around the globe

At Mars, our Five Principles guide us in the daily choices we make and the manner in which we do business. Two in particular stand out. For us, "A mutual benefit is a shared benefit; a shared benefit will endure" and "Responsibility states that, "As individuals we demand total responsibility from ourselves." Mutuality and Responsibility impose a special obligation upon us. We take upon ourselves the responsibility for seeking to ensure that we deliver mutual benefit to all with whom we interact: associates, consumers, trade partners, our communities, and last but not least our planet. Our actions should never be at the expense, economic or otherwise, of others with whom we work. We strongly believe that only success that is shared can be sustained and it is our goal to achieve this in all we do.

View Mars policies or download policies to read at your convenience

Content	Downloads	
Community relations	Examples of community relations in action	Adobe PDF Download now
GMO	GMO policy	Adobe PDF Download now
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Responsible pet ownership		
Sustainability	Sustainability policy	Adobe PDF Download now
	Examples of sustainability in action	Adobe PDF Download now

HERSHEY'S COMPANY (NYSE: HSY)

36.74 ▲ -0.32 (-1.4%)

As of Jan 19 2006 4:05PM EST (Minimum 20 minute delayed)

About The Hershey Company

Last Updated: Jan. 20, 2006

The Hershey Company (NYSE: HSY) is the largest North American manufacturer of quality chocolate and sugar confectionery products. With revenues of nearly \$5 billion and more than 13,000 employees worldwide, The Hershey Company markets such iconic brands as *Hershey's*, *Reese's*, *Hershey's Kisses*, and *Ice Breakers*. Hershey is the leader in the fast-growing dark and premium chocolate segment, with such brands as *Hershey's Special Dark*, *Hershey's Extra Dark* and *Cocoa Reserve* by *Hershey's*. *Hershey's Ice Breakers* franchise delivers refreshment across a variety of mint and gum flavors and formats. In addition, Hershey leverages its iconic brands, marketplace acuity and confectionery and nut expertise to develop and deliver substantial snacks, including *Hershey's* and *Reese's* single-serve cookies and brownies, and value-added snack nuts, including *Hershey's Milk Chocolate Covered Almonds* and *Hershey's Special Dark Chocolate Covered Almonds*. Hershey also offers a range of products to address the health and well-being needs of today's consumer. *Hershey's* and *Reese's* Snacksters offer consumers great-tasting snacks in portion-controlled servings, while *Hershey's* dark chocolate offerings provide the benefits of flavanol antioxidants. In addition, Artisan Confections Company, a wholly owned subsidiary of The Hershey Company, markets such premium chocolate offerings as *Scharffen Berger*, known for its high-cocoa dark chocolate products, *Joseph Schmitt*, recognized for its fine, handcrafted chocolate gifts, and *Dagoba*, known for its high-quality natural and organic chocolate bars. Visit us at www.hersheynewsroom.com.

- Company Profile
- Hershey Products
- The History of Hershey

Latest News

Sodexo

Corporate Responsibility

People Healthy Living Environment Hunger Community Corporate Responsibility Report

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MARS

Home Who we are Commitment

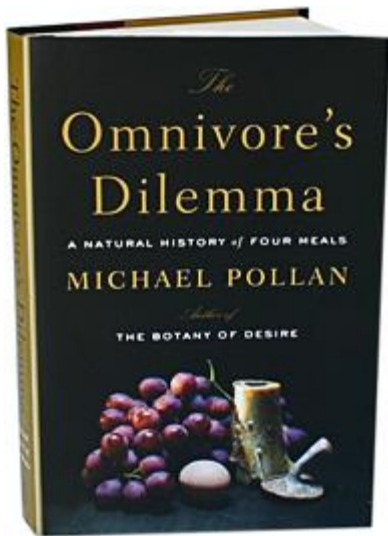
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Research involving animals	Research involving animals	Adobe PDF Download now
Responsible pet ownership		
Sustainability	Sustainability policy	Adobe PDF Download now
	Examples of sustainability in action	Adobe PDF Download now



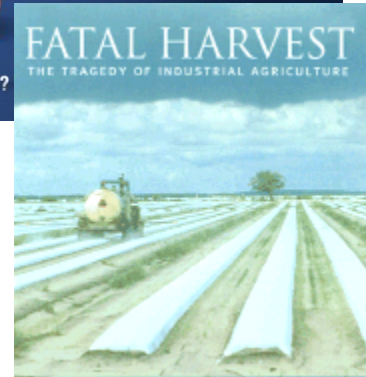
'Industrial Agriculture'

FAST FOOD NATION

THE MOST ESSENTIAL POLITICAL FILM FROM AN AMERICAN DIRECTOR SINCE MICHAEL MOORE'S 'FAHRENHEIT 9/11...'

DO YOU WANT LIES WITH THAT?

OFFICIAL SELECTION CANNES FILM FESTIVAL 2006



March 20, 2009

Obamas to Plant Vegetable Garden at White House

By [MARIAN BURROS](#)

WASHINGTON — [Michelle Obama](#) will be planting a vegetable garden at the White House this fall, the first lady said in an interview with *Time* magazine. "There will be no beets — the first lady said in an interview with *Time* magazine. "There will be no beets — the first lady said in an interview with *Time* magazine. "There will be no beets — the first lady said in an interview with *Time* magazine."

While the organic garden will provide food for the White House, the first lady said, it will also provide a place for the Obamas to grow vegetables at a time when obesity and diabetes are major health concerns.

"My hope," the first lady said in an interview with *Time* magazine, "is that the garden will be a place where we can all learn about growing food and the importance of eating healthy."

Twenty-three fifth graders from Bancroft Elementary School in Washington, D.C., will be helping to design the garden. (The first lady said she will be planting the garden with her two daughters, Malia and Sasha Obama girls' swing set.)

Hungry For Change

FOOD, INC. ABOUT THE ISSUES TAKE ACTION BLOG MULTIMEDIA ALLIANCES READING LIST

Academy Award® Nominee Best Documentary Feature

You'll never look at dinner the same way

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FOOD, INC.

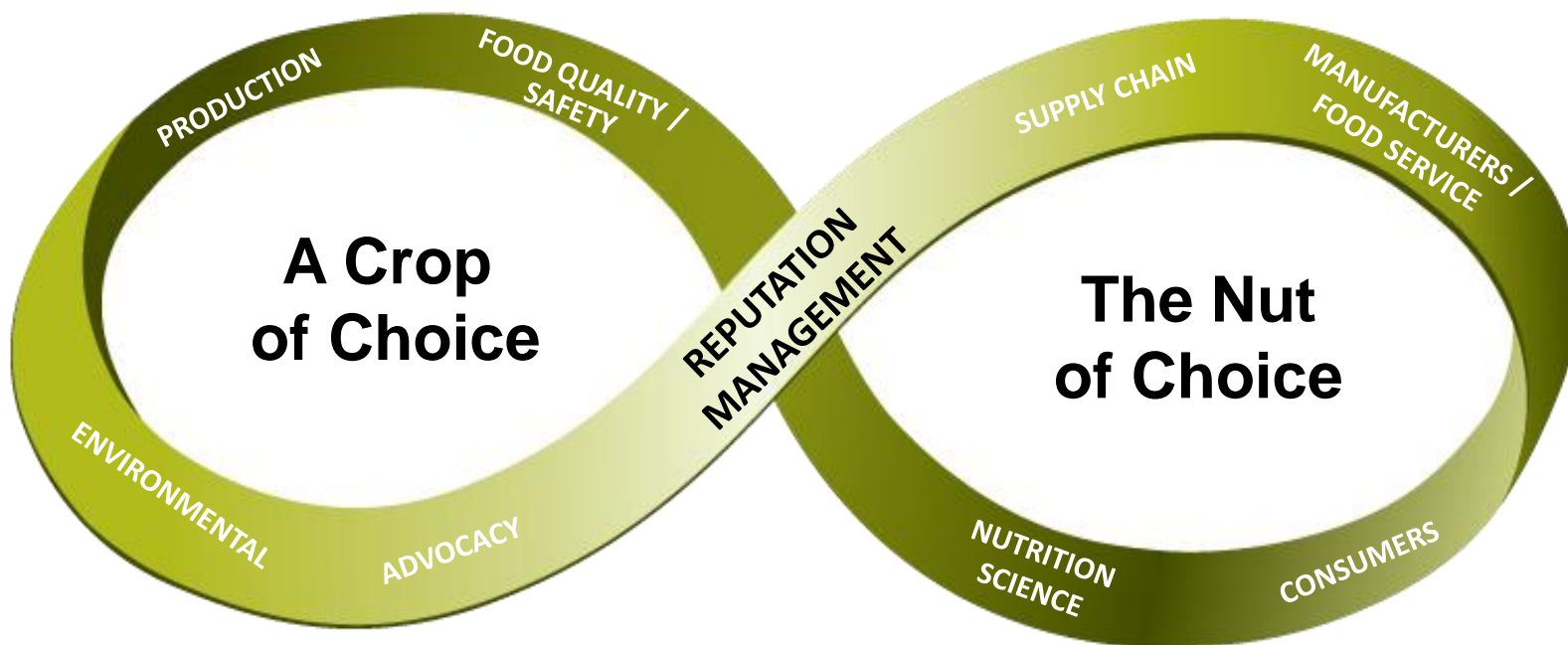


Crop/Nut of Choice Continuum





What Happens In The Field Affects The Market





Social License



Social License: The privilege of operating with minimal formalized restrictions (legislation, regulation, or market requirements) based on maintaining public trust by doing what's right.

Public Trust: A belief that activities are consistent with social expectations and the values of the community and other stakeholders.

Source: Charlie Arnot (Center for Food Integrity)



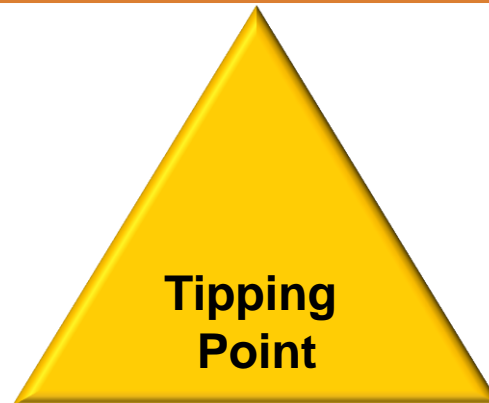
The Social License To Operate

Flexible Responsive
Lower Cost

Social License

- Ethics
- Values
- Expectations
- Self-Regulation

High Trust
Complete
Autonomy



Single triggering event
Cumulative impact

Rigid Bureaucratic
Higher Cost

Social Control

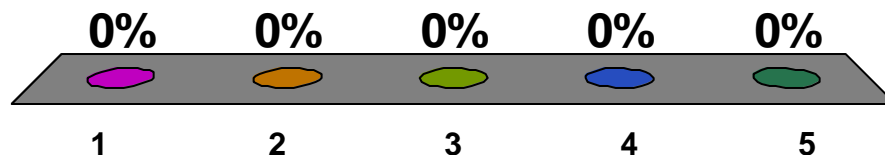
- Regulation
- Legislation
- Litigation
- Compliance

Low Trust
Prohibition



Besides Farmers, the CASP Exists to Help the Almond Industry Respond to What Group of People?

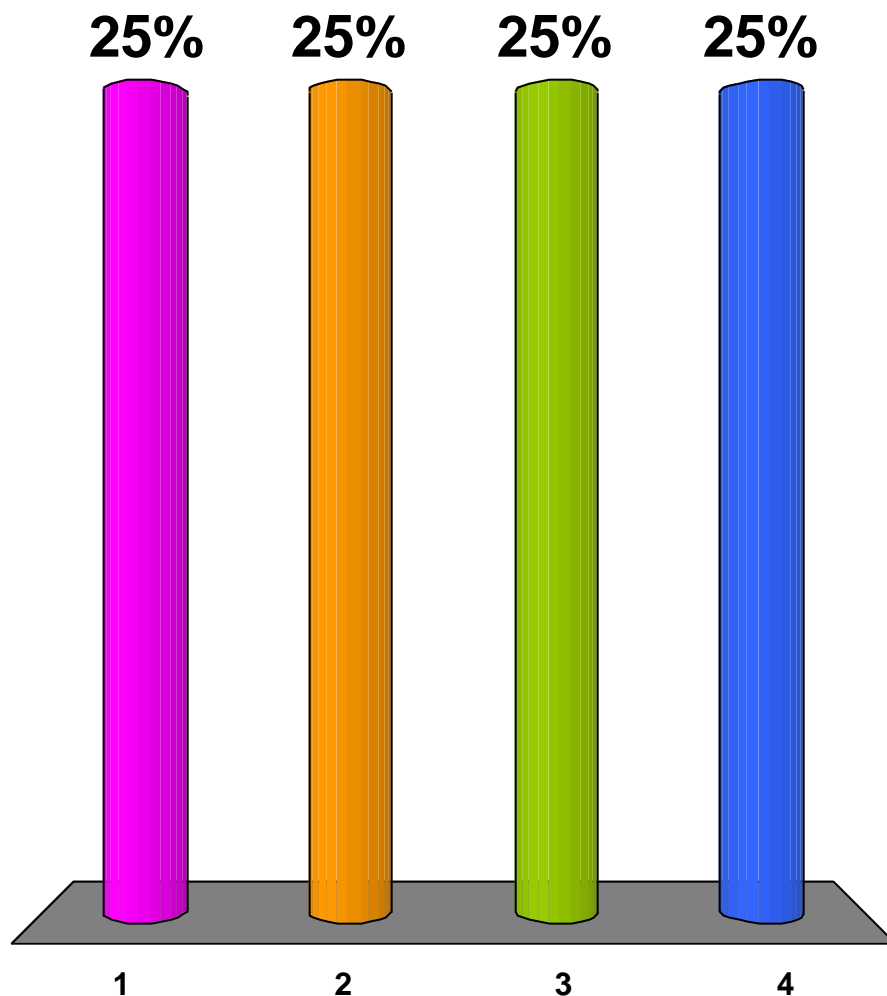
1. Buyers of almonds for chocolate manufacturers
2. Buyers of almonds for restaurant suppliers
3. Regulators & legislators
4. Buyers of almonds for breakfast cereal
5. All of the above





What Do I Need to Become a “Sustainable” Almond Grower?

1. Spend lots of money on new technologies
2. Give up modern pesticides & fertilizers
3. Replace tractors with mule teams
4. Most almond farmers probably use many sustainable practices already





You are Practicing Sustainability



Most almond farmers are using many sustainable practices already.

- **3,4,5th generation almond farms**

But society doesn't understand farming anymore.

→ To “get credit,” we want to document what you do



Almond Farmers Never Change, Right?



Almond harvest, 1939



Self-Assessment

How do we document that almond growers are sustainable?

➔ 'Self-Assessment Tool'

- Not a survey, a process by which you 'assess yourself'
- Based on grower and expert input (UC, CSU, UCCE and private consultants)
- Currently covers irrigation and nutrient management
- Additional modules in development
 - Air Quality
 - Energy
 - Pest Management

For my orchard, I am using the following practices and/or technologies for maximizing my drip or micro-irrigation system efficiency:

		Not familiar with this	I haven't tried it	I have tried it	My current practice	Not applicable
DRIP AND MICRO-SPRINKLERS						
29	The system has pressure compensating emitters to help maintain system distribution uniformity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
30	The pH of the irrigation water source(s) has been checked at least once in the past year.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
31	The EC (electroconductivity or salinity), bicarbonate, and/or iron levels of the irrigation water source(s) have been tested at least once in the past 2 years.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
32	Filtration and chemical treatment are used as needed to prevent clogging from biological causes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
33	All irrigation lines and emitters are checked for leaks or clogs at least weekly (preferably with every irrigation for micro-sprinklers).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
34	Irrigation lines are flushed at least at the start of the season, at least once mid season, and more often as needed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



CASP Workshops





Panel



Wayne Bruns

Merlyn Garber



Sample Self-Assessment Questions

Irrigation Infrastructure and Maintenance

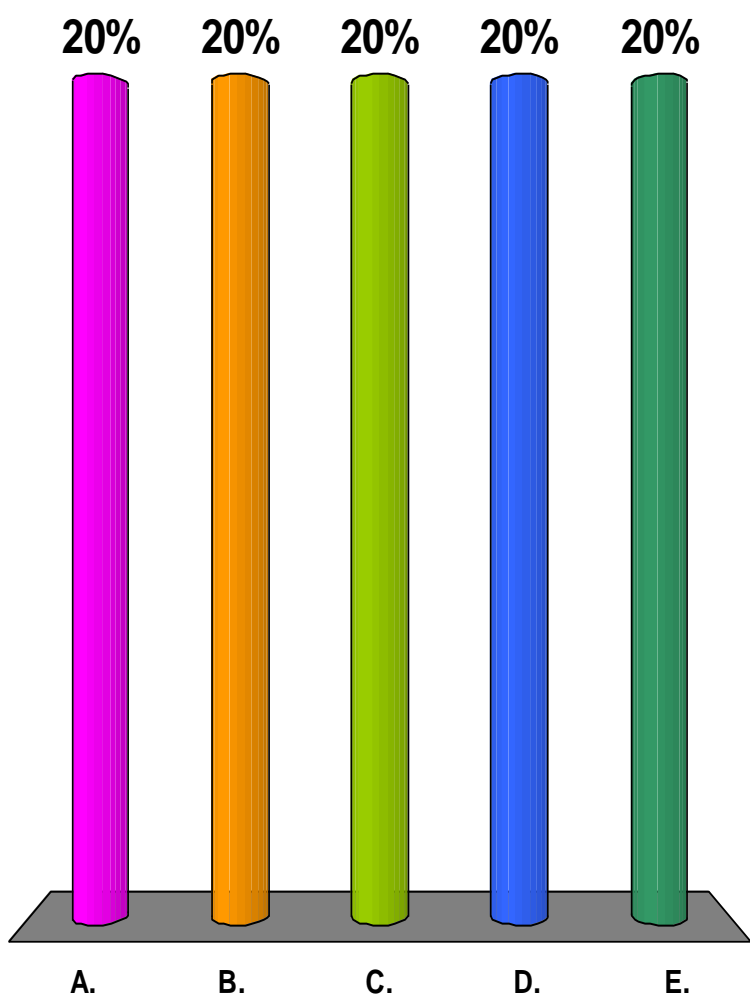
What is the type of irrigation system for this orchard?

- 1. Drip**
- 2. Micro-sprinkler**
- 3. Flood or furrow irrigation**
- 4. Sprinklers**



Irrigation Infrastructure and Maintenance

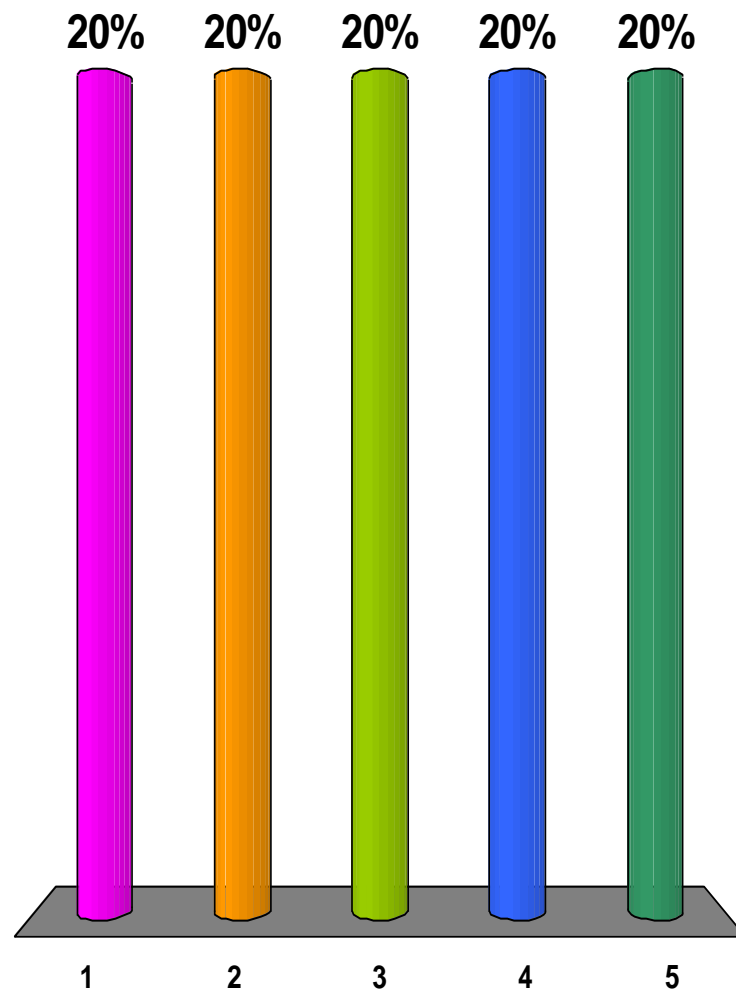
	1	2	3	4	5
For my orchard, I am using the following practices and/or technologies for maximizing my irrigation efficiency.	Not familiar with this	I haven't tried It	I have tried It	My current practice	Not applicable
A distribution uniformity test has been done on the irrigation system at least once in the past year.					





Scheduling Based on Evapotranspiration (ET)

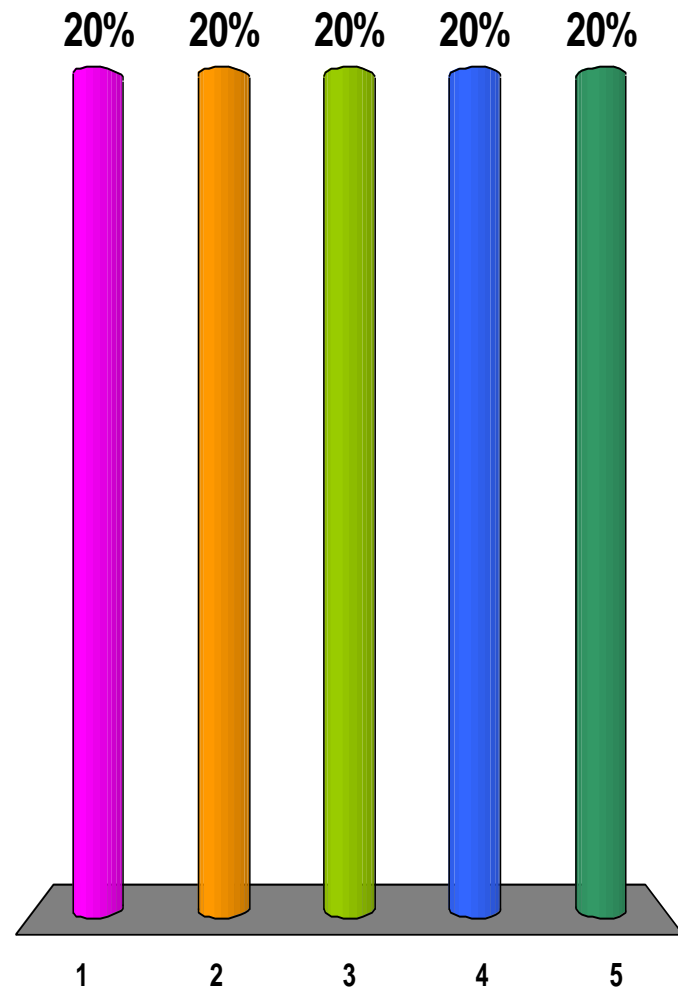
	1	2	3	4	5
For my orchard, I am using the following practices and/or technologies for determining <i>when</i> to irrigate.	Not familiar with this	I haven't tried it	I have tried it	My Current practice	Not applicable
I make irrigation decisions by following historical ET.					





Scheduling Based On Evapotranspiration (ET)

	1	2	3	4	5
For my orchard, I am using the following practices and/or technologies for determining <i>when</i> to irrigate.	Not familiar with this	I haven't tried it	I have tried it	My current practice	Not applicable
I make irrigation decisions by following real time evapotranspiration (ETc) data at least weekly and calculating the water volume leaving the plant and soil.					





Plant Stress Monitoring

1 2 3 4 5

For my orchard, I am using the following practices and/or technologies for determining *when* to irrigate.

Not familiar with this

I haven't tried it

I have tried it

My current practice

Not applicable

I decide when to irrigate based on measured plant stress by monitoring plant water stress (stem water potential) with a pressure chamber.

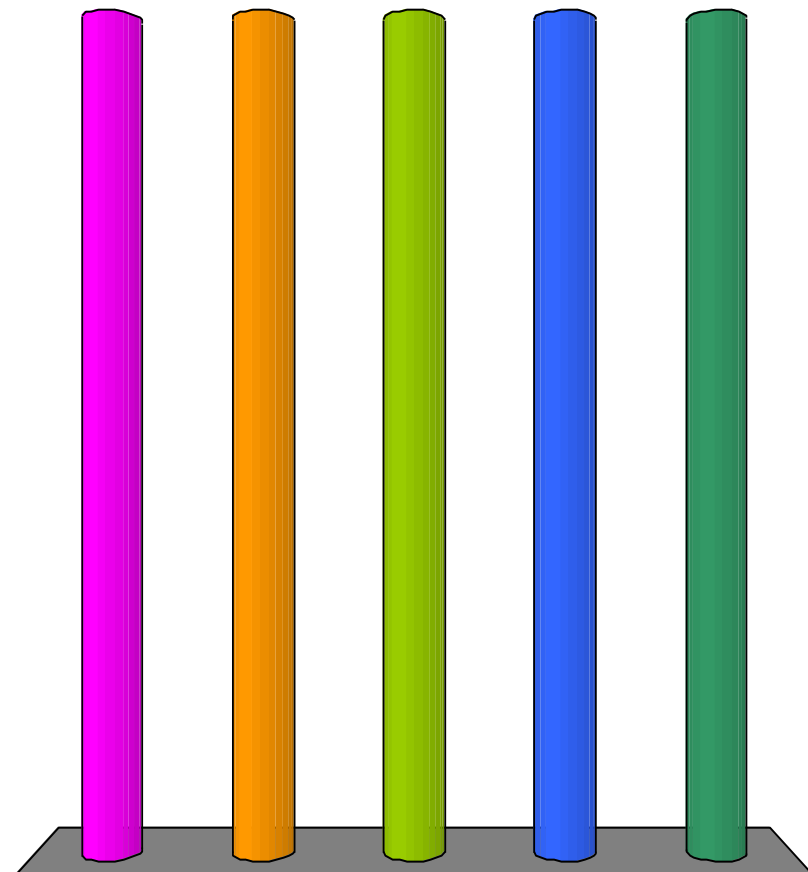
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A.

B.

C.

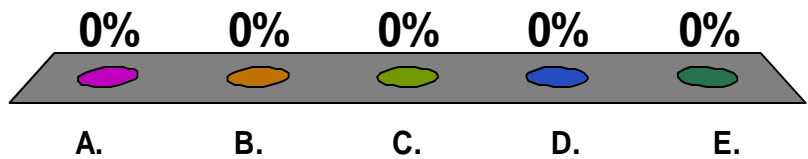
D.

E.



Soil Moisture Monitoring

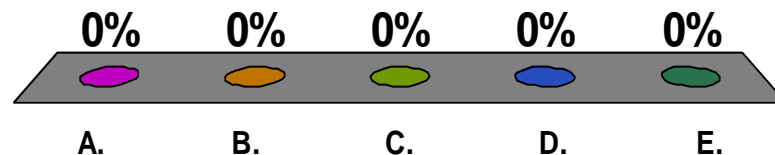
	1	2	3	4	5
For my orchard, I am using the following practices and/or technologies for determining <i>when</i> to irrigate.	Not familiar with this	I haven't tried it	I have tried it	My current practice	Not applicable
I monitor soil moisture with devices such as neutron probes, dielectric device, tensiometers, etc.					





Tissue Testing

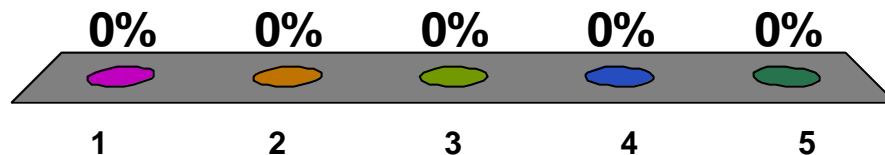
	1	2	3	4	5
For my orchard, I am using the following practices and/or technologies for maximizing nutrient management efficiency.	Not familiar with this	I haven't tried it	I have tried it	My current practice	Not applicable
Plant tissue tests have been taken prior to the application of nutrients & the test results actually guide the amount of nutrients applied in the orchard.					





What Kind of Things Would Attract You to Do a Self-Assessment? Select all that apply

1. Free meal at workshop
2. Free beer or wine at workshop
3. Equipment/trade show/technical information at workshop
4. Ability to do the assessment online at home
5. CEU credits for doing self-assessment





Upcoming Workshops



December 15, 2 - 6 p.m. (Beer & Appetizers provided)

Waterloo Ca Restaurant

10447 E. Waterloo Rd. (Hwy 99 to Waterloo Rd East 6 miles)

Stockton, CA

December 17, 2 – 6 p.m. (Beer & Appetizers provided)

Granzella's Inn

391 6th Street (next door to Granzella's Restaurant)

Williams, CA 95987



Sign Up to Get Workshop Notices



Cards

Visit the ABC booth in the tent

**Stand Tall!!
Tell the Good Story**



Wrap-Up, Discussion and Q&A



Lunch Sponsor



syngenta



Rustler Giveaway

Register to Win the New Holland Rustler!



Fill out your entry form and drop it
at the **Garton Tractor booth #81** or
**SmartCube Packaging System
booth #82** in the Exhibit Hall

Drawing will be held **Thursday, December 9** at
the **12:00 pm luncheon**.

Drawing is open to almond growers. *Growers
must be present to win.*

Name	<input type="text"/>
Company	<input type="text"/>
Phone	<input type="text"/>
Email	<input type="text"/>



Growers:

Win a New Holland
Rustler from **Garton
Tractor** and
**SmartCube Packaging
System**. Complete
your entry form and
return to booth #81 or
#82.



Sessions at 1:30 pm:

**Pollination Updates in
Grand Ballroom**

**Leveraging Consumer
Demand to Become an
Essential Ingredient
in Arbor Theater**



growing
ADVANTAGE

Leadership through Research

20
10

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Conference