

**University of California**

Agriculture and Natural Resources ■ Cooperative Extension Colusa County

Meeting Announcement

UCCE Rice Production Workshop

An in-depth workshop that covers the principles and practices of rice production

Friday, July 24, 2015
 The Refuge Restaurant
 1501 Butte House Road
 Yuba City, CA 95993

Program:

8:30	Sign in, pick up class materials	10:30	Variety Selection
9:00	Introduction and Workshop Overview	11:00	Invertebrates
9:10	Rice Growth and Development	11:30	Diseases
9:30	Land Formation, Water Management	12:00	Lunch
9:50	Tillage, Planting and Stand Establishment	1:00	Fertility
		2:00	Weeds
		3:00	Adjourn
10:10	Break		

Enroll on-line at <http://ucanr.edu/2015riceworkshop>. Prepaid enrollment (\$100) is required, and **enrollment is limited to 75 people**. Please enroll by July 21st to ensure your participation.

Seats will be filled on a first-come basis.

DPR and CCA continuing education credits requested.

For more information, contact Cass Mutters (530-538-7201), Luis Espino (530-458-0578), or Michelle Leinfelder-Miles (209-953-6120), Farm Advisors, UC Cooperative Extension.

New UC Rice On-line

Bruce Linqvist, Rice Specialist, UCCE

The University of California Cooperative Extension Rice website has been updated with a new look and a lot of new information which we think you will find useful. With UC ANR and UC Davis (Department of Plant Science) support we have been able to hire a webmaster to develop this site and keep it maintained.

On this site you will find rice management guidelines such as variety selection, nutrient and pest management, water use, straw management and presentations from recent meetings, production costs, links to the UC Rice Blogs and newsletters, dates and venues for upcoming meetings, contacts and links to other important rice sites.

We invite you to visit the site and take a look. We want to make sure this site is relevant and meets your needs, so your comments are more than welcomed. Just click on the "Click to tell us" button and leave your thoughts. The address for the site is <http://rice.ucanr.edu/>; however, if you use the old address you will still be directed to this site. Also, if you just google "UC Rice", the first search result is our website.

Midseason Nitrogen

Luis Espino, Rice Farming Systems Advisor, UCCE

In California water-seeded rice, N fertilizer is usually applied at two times. Most of the N fertilizer is applied pre-plant as aqua, injected in the soil. Also at this time, starter fertilizer is sometimes applied. The second time of application is midseason, between panicle initiation (PI) and panicle differentiation (PD), and is referred to as topdressing.

Topdressing is done at PI because at this time plants can take up the N very efficiently. Nitrogen applied between PI and PD is taken in 3 to 7 days with 65 to 80% efficiency. At this time, plants have a well developed root system that allows them to take up the N quickly. However, not all fields will need a N topdress. It is possible to reach maximum yields with just the N applied at planting. If a topdress is applied when not needed, one increases the risk of disease development, panicle blanking and lodging.

Several factors can affect the N status of plants at PI, but probably the most important one is the length of drain periods for weed control. Extended drain periods can reduce the amount of N available, and plants may need an extra shot of N to obtain top yields. The need for a topdress needs to be evaluated at PI with a chlorophyll meter, the leaf color chart or leaf foliar analysis. For California medium grain varieties, the critical N concentration at PI is 3.3%; concentrations lower than this value indicate a N deficiency and warrant topdressing.

Diseases and Cultural Practices

Luis Espino, Rice Farming Systems Advisor, UCCE

Diseases are a continuous threat in California rice production. Early on, seed rot and seedling disease can kill seeds and seedlings and reduce stand. Bakanae can also kill young seedlings, though its symptoms might not appear until after tillering, blanking panicles of infected plants. During tillering, stem rot and aggregate sheath spot can infect plants and, under favorable disease conditions, kill tillers. Lastly, blast can infect foliage and panicles, killing whole plants or blanking infected panicles.

Cultural practices play a very important role in the prevention and management of these diseases. Things like variety selection, seeding rate, fertility, and rice straw management can influence disease incidence and severity. Fungicides are only recommended for control of aggregate sheath spot, stem rot or blast.

Use of certified seed with good vigor will ensure fast seed germination, reducing the likelihood of seed rot and seedling disease. Plant density can have an effect on the incidence and severity of stem rot and aggregate sheath spot. The microclimate created by dense stands can be very favorable for these diseases; to avoid dense stands, the recommend seeding rate in most cases is 150 pounds per acre.

Blast and stem rot are favored by excess nitrogen. It is hard to give a specific nitrogen fertility recommendation; there is a lot of variability between regions and fields. However, growers can experiment by varying their typical nitrogen rate by 5% in a portion of a field and in that way arrive at a nitrogen rate that maximizes yields without causing disease outbreaks or excess lodging. The application of a midseason topdress should be assessed using the color chart or a chlorophyll meter.

Besides nitrogen, water management also affects the incidence and severity of blast. Water seeding reduces blast transmission from seed to seedling, and therefore is recommended over dry or drill seeding. Fortunately, in California most of the rice acreage is water-seeded. Also, continuous flood limits blast development. Generally, fields that are drained for a herbicide application, stand establishment, or fields that have lost their water during early crop development tend to have more severe blast infections.

Variety selection also plays an important role in blast infection and development. Rice varieties M-104 and M-205 have the least tolerance to blast. If these varieties are planted in areas where blast is endemic, a fungicide treatment may be necessary to prevent disease development. M-208 is the only rice variety resistant to blast in California.

Rice straw management also plays a significant role in the cycle of most diseases. Rice straw can serve as inoculum for bakanae, stem rot, aggregate sheath spot, and blast. Elimination of straw by burning, incorporation, winter flooding or removal can reduce the amount of inoculum present in the field before planting. However, in the case of blast, straw elimination is not a guarantee of a blast-free field because the blast fungus produces spores that can travel from infected to uninfected fields during the season.

Bird habitat program continues and expands

Laura Jensen, The Nature Conservancy

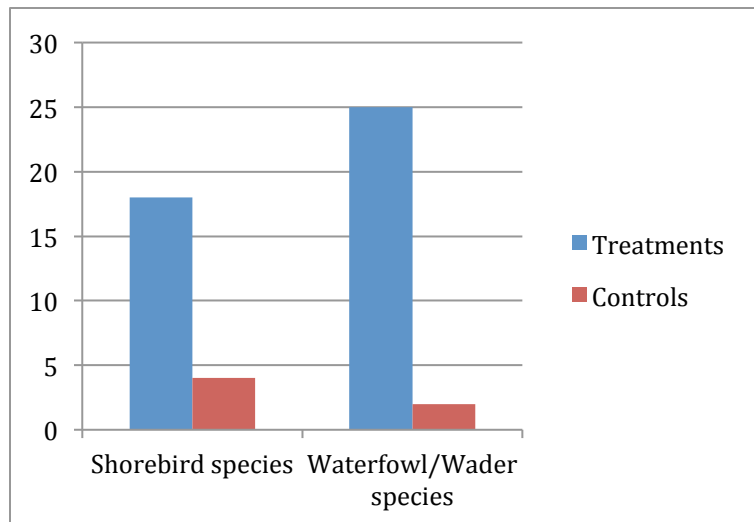
- BirdReturns is a shorebird habitat program from The Nature Conservancy (TNC), organized in cooperation with the California Rice Commission
- BirdReturns compensates growers to provide shorebird habitat –maintain water level depths at maximum of 4 inches for a given 2-week period in August, September or October 2015
- To apply, farmers submit a competitive bid – name your price
- Deadline to apply: June 26th

The BirdReturns Fall 2015 program is being offered by The Nature Conservancy in cooperation with the California Rice Commission. BirdReturns compensates growers to perform straw management and shallow water management on their rice fields. These field conditions, provided at the right times of year, provide critical benefits to shorebirds traveling the Pacific Flyway. By working together, we are able to provide habitat where and when birds need it most.

Fields have been flooded up, rice has been planted and crop

management is under way. Harvest will be here before we know it. Before then, growers should consider applying to the BirdReturns shorebird habitat incentive program available for fall 2015. This is the third year of BirdReturns, and, based on the bird response in previous years, we are offering a refined program that promotes shallow flooded habitat for shorebirds. We have been able to fine-tune our recommended practices based on the data, which is a reflection of the bird response as well as feedback from growers: shallow habitat (a maximum of 4 inches water depth) is exactly what the migratory shorebirds need. Keeping water depths shallow provides the best habitat with the least amount of water, thus conserving a valuable resource while ensuring that birds have the habitat they need.

By comparing the fields participating in the BirdReturns program with a collection of other ‘control’ fields throughout the valley that were not enrolled in the program, TNC scientists were able to determine the value of the participating growers’ efforts. In addition, the scientists were able to determine the heightened need for habitat in the earliest part of the season (mid-August through early October) when there is little shallow water on the



landscape. This habitat is extremely critical to returning migratory shorebirds. Surveys from last fall's BirdReturns program help illustrate the incredible habitat that was created. Nearly 60,000 migratory shorebirds were counted using enrolled fields and a mere 96 shorebirds were counted at the control fields. Participating fields attracted nearly 5 times as many shorebird species than control fields and over 12 times as many waterfowl species.

We encourage you to submit a bid that reflects your price of participation and is based on your best guess about surface water or groundwater availability. In addition, consider enrolling fallow fields or early harvested fields that will be available for flooding in the early season (mid-August through early October).

The more interest in the program, the more likely BirdReturns will become a success. Help spread the word and tell your neighbors!

The third season of BirdReturns is upon us – as is the third year of California's historic drought. Now, more than ever, the birds need you!

Learn more

Visit our website: <http://www.birdreturns.org>

Email us: birds@tnc.org

Call us: (916) 642-8055

Come see us in person:

BirdReturns Workshop	
Date:	Thursday June 23rd
Time:	1:30pm - 3:00pm
Location:	Bonanza Inn Yuba City