SWAN TOURS 2026–2027



INTRODUCTION

Thank you for signing up for a Swan Tour!

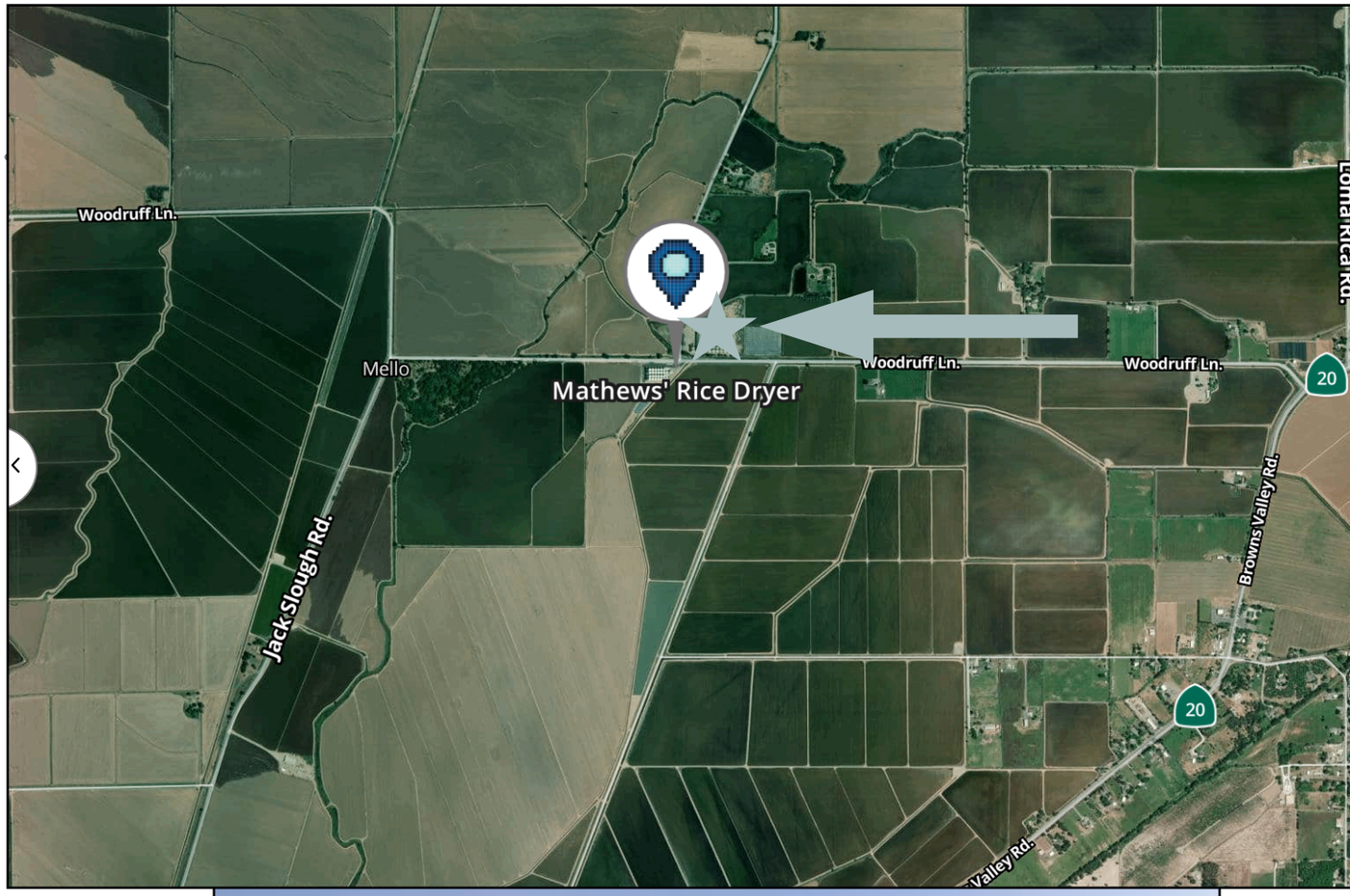
We are excited to celebrate 16 years of Swan Tours! These tours are hosted by the California Department of Fish and Wildlife (CDFW), in partnership with Mathews Rice.

We will be meeting for the tour just north of Marysville at the Mathews Rice Dryers, **8800 Mathews Lane.** The rice dryers sit on northeast corner of Mathews and Woodruff lanes. When you near the site, please look out your windows—instead of using GPS, which will send you to the wrong location.

We will be scouting birds in a caravan manner, led by a CDFW naturalist. We will be touring flooded rice fields owned by the Mathews family.

Although we will be inside vehicles the majority of the time, please dress for the weather, as you will want to roll down your windows to hear the plentiful and boisterous bird sound…

The following information and guidance are mandatory pre-tour reading—in order to ensure you are fully prepared for your upcoming birding adventure!





Mathews Rice Dryers

WELCOME TO MATHEWS RICE!



Since 1884, the Mathews family has been actively farming this fertile area in the Great Central Valley. They currently farm about 5,000 acres of rice each year.

California ranks second for overall rice production in the United States. We are the top state for production of medium and long grain Japanese rice varieties.

The Mathews property sits within an area called District 10, an irrigation district with water supplied from the Yuba River watershed.

The Mathews family has a strong love of nature and practices wildlife-friendly agricultural methods. For example and as you will see on tour, they manage their fall and winter field flooding to correspond with—and sustain through—migratory bird season.

As a result, District 10 now boasts one of the largest concentrations of overwintering tundra swans on the Pacific Flyway!



WELCOME TO THE PACIFIC FLYWAY!

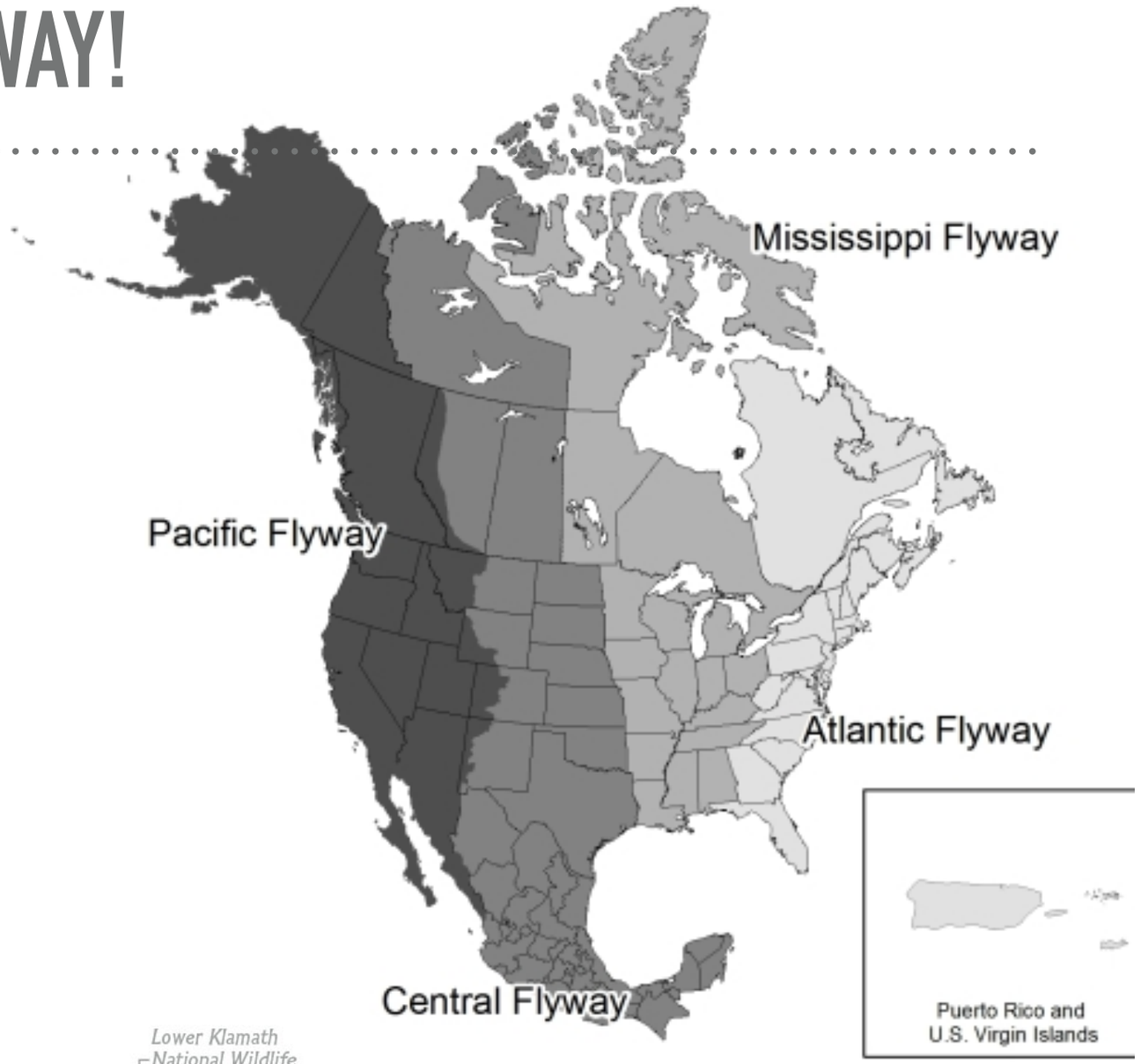
The Pacific Flyway is one of the four flyways —or highways in the sky—used bi-annually by the migrating birds of North America.

In fall before their food and water sources are frozen over, birds must migrate down from their northern breeding territories in order to survive.

More than one billion birds—large and small —wing their way on the Pacific Flyway. More than 70% of these birds pass through, or overwinter in, the Great Central Valley.

Along their continental journey, birds must have wild places to stop, rest, feed, and overwinter. Our national wildlife refuges and state wildlife areas lie along these bird routes.

Yet private land is also essential to these birds' survival. In the case of rice field flooding practices, private landowners have helped bolster the migratory bird populations on the Pacific Flyway.





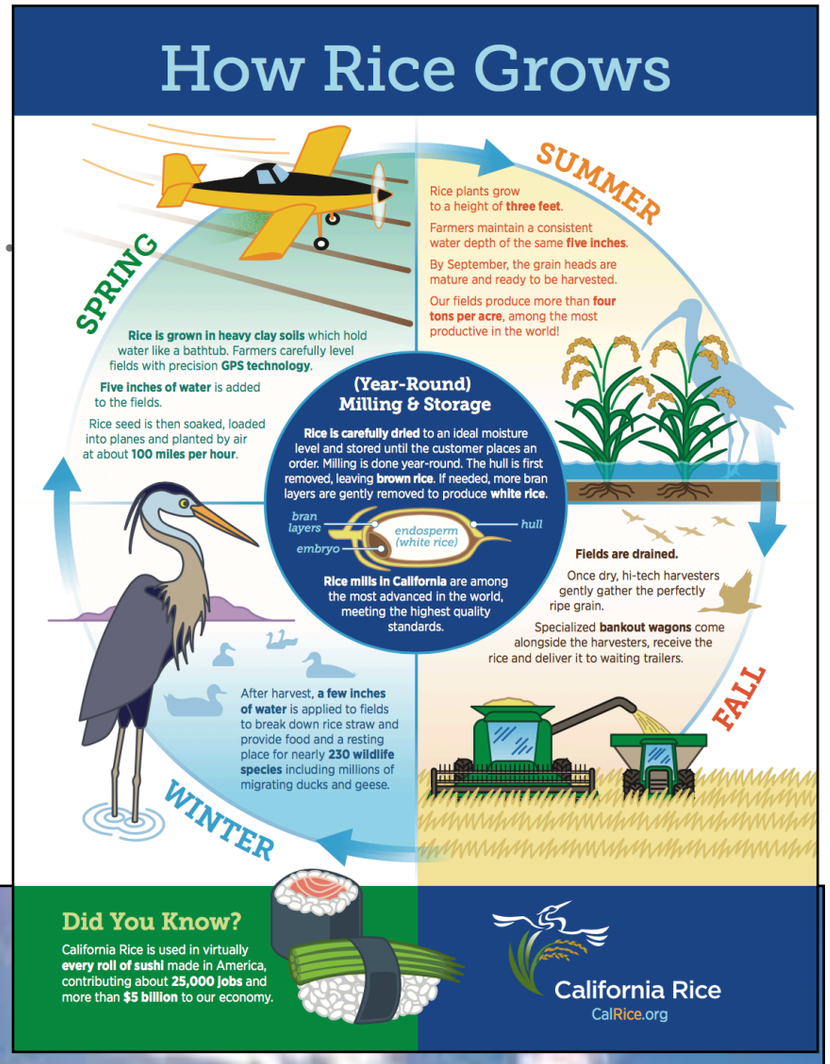
CALIFORNIA RICE FARMING PRACTICES

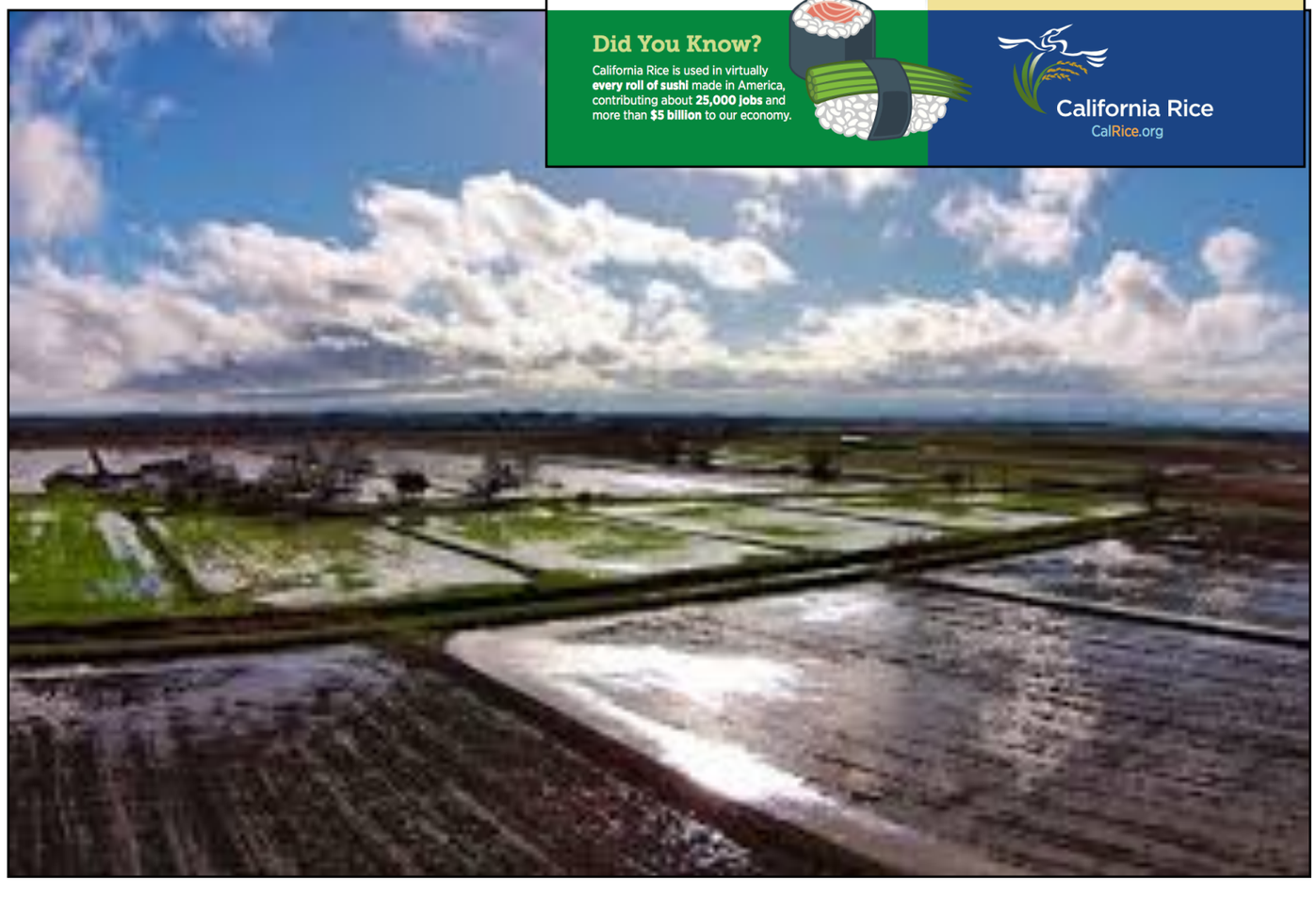
Historically, Central Valley rice farmers would burn their fields after harvest as a necessity to break down the crop's remaining hard stubble.

However, this mass burning led to dangerous air quality issues in the valley. As a result, in 1994, state legislation passed prohibiting further rice field burning. Farmers were given 10 years to implement the change.

Farmers tried various techniques to break down the stubble. They soon found that discing the field then flooding it up in the fall and winter—and attracting migratory birds—did the job very successfully. The birds helped break down the crop, while leaving fertilizer behind.

At that time, no one imagined what a boon for the birds this new farming practice would be!





FOR THE BIRDS

The rice field flooding better mimics what the historic Central Valley looked like. Vast flooding and wetlands were normal, created seasonally from wild rivers draining rain and snowmelt into the valley.

The rice field flooding allows for more room for bird populations. When rice fields were burned, migratory birds were limited to using refuges and preserves during migration season. This limiting habitat would limit overall bird resources and populations. Today with this additional flooding in the valley, bird populations have room to survive and grow.

The rice field flooding creates ample bird food available through the entire migratory season. First, the birds eat any spent grain left on the field from the rice crop. Soon after, invertebrates are plentiful in the pond and emergent vegetation sprouts, attracting crawdads, reptiles and amphibians. Quite a winter smorgasbord for a migratory bird!

Get ready to meet one of the largest!





TUNDRA SWAN (CYGNUS COLUMBIANUS)

An ancient species of bird, swans are often associated with human ideals of romance. While it is true that breeding pairs do mate for life, tundra swans would better describe themselves as strong and formidable.

Standing more than four feet tall, the tundra swan is gigantic, as far as birds go, weighing up to 20 pounds with a 5.5 foot wingspan. They weigh so much that they are unable to take off and fly without running on land or on the water.

Also called the whistling swan, tundra swans do not hesitate to fiercely protect their mates, young and territories from predators and other unwanted intruders.

When we are out touring, it is most important to remember that these birds are not the Queen of England's swans. Instead they are as wild as wild gets. For the young, migration is the first time they witness humans and human impacts on the land.





A SWAN'S LIFE

Tundra swans don't reach sexual maturity until they are three to four years old. At that time, they spend most of the year in solitary bonded pairs, breeding at the top of the world in huge territories in the remote Arctic.

Swans are fully adapted for their lifestyles. They are nearly weatherproof and have multiple layers of feathers to keep them warm. They also have the ability to alter their blood flow to their feet to prevent heat loss in frozen conditions.

Their migration route down south takes the entire tundra swan population, estimated at 100,000 individuals, first to the Dakotas. Then, half the population heads southwest to the Central Valley, while the other half heads southeast to the Atlantic Flyway.

During migration and at their overwintering grounds—about three months of the year—is the only time to see the tundra swans flocked up in mass.

As you will see with their body language and calls, the birds enjoy this time together, being gregarious, reuniting with their friends and family, and meeting new additions. Swan young are called cygnets.









Satellite images of tundra swan migration

DISTRICT 10 SWANS

In District 10, you will see tundra swans foraging and moving around together in family groups.

The juveniles are easily recognizable by their smaller stature and still brownish feathers, especially on their necks and head. By the time the swans head back north in January, the juveniles will have their full white plumage.

As importantly, the juveniles will have learned the essentials for survival from their parents.

Before their parents head back alone to their remote breeding territories, they leave their young with other juveniles on lakes in Canada. It is here where they meet a mate and hang out safely with more experienced birds.

When birds do bond and pair up for life, the couple will use the migration route of the female swan.







OTHER BIRDS AT DISTRICT 10

While you can set your watch to the tundra swan migration calendar—arriving the first week of November and leaving the second week of January—for most migratory birds, it is weather events that push them down south from the north. These migratory birds include:



American coot (*Fulica americana*)



Northern pintail (*Anas acuta*)



Greater white-fronted goose (*Anser albifrons*)



Northern shoveler (*Anas clypeata*)



Snow goose (*Chen caerulescens*)

Also abundant in District 10 are white-faced ibis, a resident bird that congregates in large flocks in winter.



White-faced ibis (*Plegadis chihi*)

DISTRICT 10 IS RAPTOR HEAVEN

Raptors tolerate each other in fall and winter, as they take full advantage of the abundant prey. Keep an eye out for these:



Peregrine falcon
(*Falco peregrinus*)



Bald eagle
(*Haliaeetus leucocephalus*)



Red-tailed hawk
(*Buteo jamaicensis*)



American kestrel
(*Falco sparverius*)



Turkey vulture
(*Cathartes aura*)



Northern harrier
(*Circus cyaneus*)

DISTRICT 10 IS A HUNTING AREA



While tundra swans are not hunted on the Pacific Flyway, most of the birds they hang out with are.

We may hear gunshots as we're touring. District 10 is known as the best goose hunting in the state. There are several hunting clubs in the area, as well as numerous rice checks rented by hunters for the season.



Each year before and during hunting season, hunters set up elaborate decoy scenes at their hunting blinds to try to attract wild geese and ducks. It is not easy to hunt wild birds. They are smart and savvy—and learn quickly where hunting areas are.



Waterfowl hunting is a big part of California's culture as well as resource conservation. When hunters buy hunting licenses and pay fees to purchase hunting equipment, that money goes toward our state's fish and wildlife conservation.

True hunters practice ethical hunting methods and follow state regulations.

WILDLIFE VIEWING RULES AND SAFETY

During the tour as we survey and observe birds on the flooded rice fields, we will be incorporating ethical wildlife viewing practices. **This protocol is mandatory.**

- Absolutely no approaching or rushing the birds on foot. Keep your distance. The birds need room, rest and calories.

- No flushing, or lifting up, of the flocks from the fields. Birds are on alert and ready to lift off when their necks elongate and heads bob.

- Follow the lead of your guide while caravaning. No stopping your car, unless your guide stops his or her car. If stopped, stay in your car. If we do get out, stay by your vehicle and use it as camouflage.

- If you bring a scope, don't swing it around or let the birds see it. The birds think it's a shotgun and will flush. Set up your scope next to or behind your vehicle.

- Obey all road signs and watch for other drivers not in our tour group. This area tends to have speeding vehicles.

- Communicate via walkie talkie with your guide, if and when you have any specific questions or comments.





OTHER LOGISTICS

- All tour participants—driver and passengers—are required to read this pre-tour information packet.
- Please bring your own bird book and binoculars.
- At the staging area, restrooms are available for use with a wash basin and hand soap.
- If you have room in your vehicle, carpooling is highly encouraged. The fewer vehicles on tour, the better.
- Please return your vehicle's loaned walkie talkie to your guide when the tour is complete.
- Your feedback is important! After the tour, you will receive a post-tour survey via your email, please complete it promptly as it helps us improve the program. Any other comments or suggestions, please email them directly to the program coordinator: *genelle.treaster@wildlife.ca.gov.*
- If you want to send a thank you note to our rice farmer, you may send it to the staging area address, *Attention: Charlie Mathews.*

Thank you for attending the California Department of Fish and Wildlife's Swan Tours!
We greatly appreciate your participation!



READY, SET, GO, ENJOY!

In order to ensure you have properly prepared for your upcoming tour, please answer these questions, then email your answers to *genelle.treaster@wildlife.ca.gov*

1. How long has the Mathews' family farmed this area?

2. What is the name of the flyway over California?

3. How many flyways are there over North America?

4. When wildlife viewing, what personal behaviors are important?

5. Besides tundra swan, name three other bird species you're likely to see.

6. When a pair of tundra swan hook up for life, who's flyway do they follow? Male or female?



Now, you're ready to go! Enjoy!