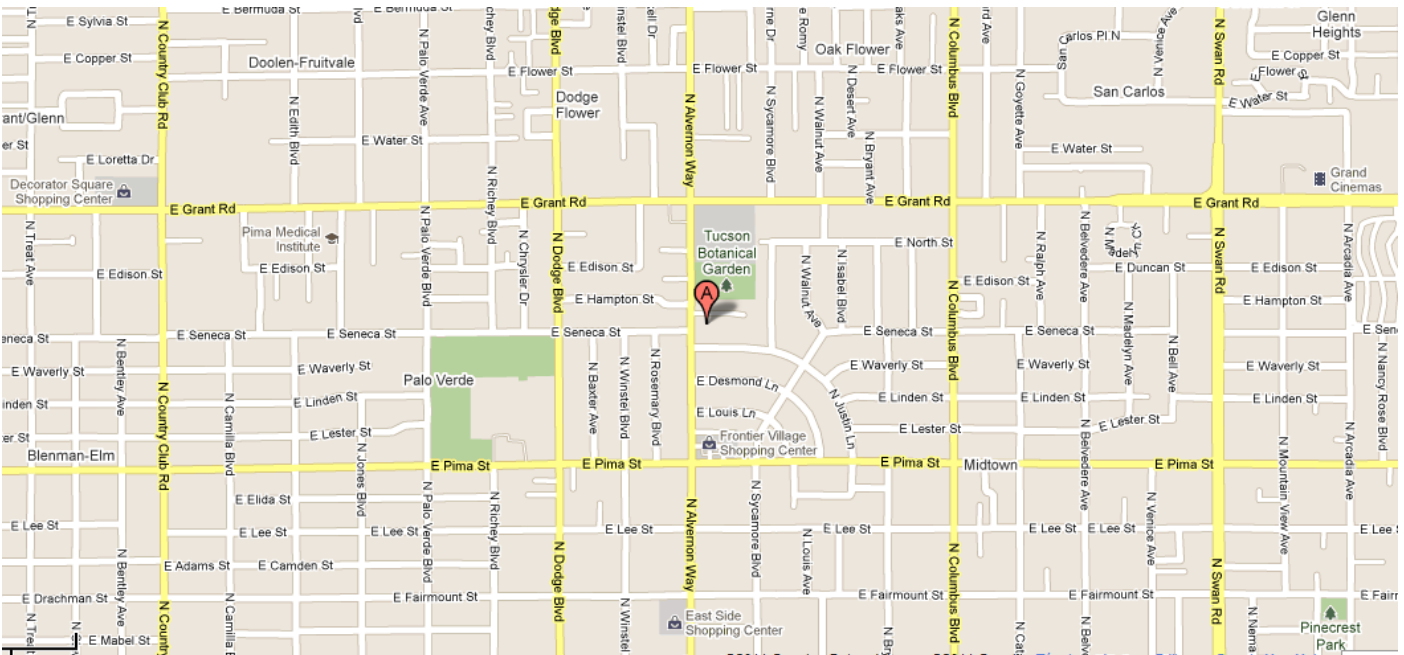


*Yume Gardens of Tucson  
June 26  
Education Starts at 2:00*



4905 N Via Entrada  
Tucson, AZ 85718  
Address Service Requested

**Yume Gardens of Tucson**  
2130 N Alvernon  
Phone: (520)



*Yume Gardens of Tucson  
June 26  
Education Starts at 2:00*

Our next club meeting will be at Tucson's future "Yume Gardens of Tucson" at 2130 N. Alvernon Way 85713 (this is just south of the Tucson Botanical Gardens). There is a bus stop right in front and a sign on the "Alliance Francais" sign on the building. Limited parking is available in the lot, but you can park on Hampton which is the street to the north of the property. There are two buildings on the property that will be used as meeting rooms for various clubs and groups in town.

The owner, Patricia DeRidder has always wanted to build a Japanese garden in Tucson and has embarked on this project alone. Much of the grounds have already been cleared and the buildings renovated. This garden is intended to be a collection of "Tsubuniwa" or small courtyard-style gardens. Since it is only fitting to include a small koi pond in this garden, she has asked SAKA for help.

The hole is dug; however, Ms. DeRidder would like our club to give her suggestions for what is needed to complete the pond. We'll see the property and discuss options for building materials and filtration. This will be a fun opportunity to learn about pond building from the ground up, discuss various filter options and helping to promote the koi hobby in town.

Meeting will start at 2pm, Sunday June 26, 2011

## SAKA, Inc Club Officers

<b>President</b>	Bob Panter <a href="mailto:sakabob@yahoo.com">sakabob@yahoo.com</a> (520) 747-7278
<b>Vice President</b>	David Young <a href="mailto:koiman@mindspring.com">koiman@mindspring.com</a> (520) 682-7697
<b>Secretary</b>	Lynn Riley (520) 825-9066
<b>Treasurer</b>	Dan and Martha Cover <a href="mailto:mardan79@msn.com">mardan79@msn.com</a> (520) 297-4071

## Committees/Points of Contact

<b>2010 Pond Tour</b>	Jeanmarie Schiller <a href="mailto:Tucsonpondtour@yahoo.com">Tucsonpondtour@yahoo.com</a> (520) 299-1876
<b>31<sup>st</sup> Koi Show Co-Chairperson(s)</b>	TBD
<b>AKCA Representative</b>	Debby Young <a href="mailto:debbyt@akca.org">debbyt@akca.org</a> (520) 682-7697
<b>Newsletter Editor</b>	Brent VanKoeving <a href="mailto:bvankoeving@longrealty.com">bvankoeving@longrealty.com</a> (520) 780-3980
<b>Koi Health Advisor</b>	Noel Shaw <a href="mailto:koidoc@noelshawdc.com">koidoc@noelshawdc.com</a> (520) 400-0335
<b>Membership Chairperson</b>	Faye Hall (520) 297-1253
<b>Raffle Chairpersons</b>	Wanda & Bruce Triebel <a href="mailto:wkt56@comcast.net">wkt56@comcast.net</a> (520) 572-0060
<b>Education Committee</b>	Erin Riley <a href="mailto:elriley@aol.com">elriley@aol.com</a> (520) 818-6490

Editor's Note: Articles published herein are intended for the enjoyment of all and come from a variety of sources. The articles are not intended to replace veterinary advice. Pond owners, and not the club, are responsible for the health of their koi, water changes, what to do, and how to treat their pond. Reasonable effort is made to review these articles for accuracy before including them in the newsletter.

## Presidents Corner

6-15-11

Please keep Curt and Lisa Ogren of Mountain View Koi in your thoughts. The Monument Fire in Sierra Vista is perilously close to their house and business. They could use all the positive vibes and prayers we can send their way.

June, the heat is on, and I will bet the temp of your pond is up as well.

Speaking of your pond, how are your koi? Better yet what is the quality of water they live in? Have you checked your water lately?

SAKA meetings, what are they? They are a time for education and a time for business. They are also a time for koi enthusiast to get together and share their knowledge with each other, and learn from one another. Come to a meeting and see what we are all about. We have fun, shouldn't you?

For the love of Koi,

**Bob Panter,** President SAKA, Inc.

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### [Club Meetings](#)

**Hosting Meetings:** For those wishing to host an upcoming business/education meeting, the club will reimburse the host up to \$50 (with receipts) toward food/beverage for the meeting. **We would like to see your pond!** Please contact Bob Panter if you are interested in hosting a meeting.

### [Club Announcements](#)

## **Business Meeting Minutes**

Date & Location: May 22, 2011, at Debbie and Noel Shaw home in Tucson, AZ.

Call to Order: Meeting called to order by Bob Panter at 3:49 PM.

Minutes: Motion made to accept and second the April 2011 Minutes as read.

Number of members in attendance: 14 members.

Treasurer's Report: Current checking account balance: \$12,849.84 -- \$993.00 from Pond Tour and \$85.00 membership dues. Japanese Relief Fund received \$227.00 donation from our club. The members were reminded that the 2011 Pond Tour location owners were granted automatic membership for this year.

AKCA: Debby Young reported that the AKCA are reducing the Koi magazine by four pages; eliminating some of the club notes. Election results will be printed in the June issue. Our Pond Person of the Year has been submitted.

Correspondence: None

2011 Show and Auction Committee:

Old Business: Bob Panter reported that the we should be getting the tool boxes for the trailers soon.

New Business: None

Announcements: Red canna lilies are available from Noel Shaw. The Hall's have small, green floating plants available.

Giveaway by Dave Young were koi food and samples of Ultra Balance.

Adjournment: The meeting adjourned at 4:12 PM.

Educational Talk: Dave Young gave a very informative and interesting judging lesson on four different koi.

Lynn Riley.



Junichi Ihara, Consul General  
Consulate General of Japan in Los Angeles  
350 South Grand Ave., Suite 1700  
Los Angeles, CA 90071

June 1, 2011

Dear Consul General Ihara:

Enclosed please find \$3,738.07 for the earthquake and tsunami relief effort in Japan. We deeply appreciate your assistance in directing these funds to the Red Cross of Japan. Please accept our prayers and best wishes for the country's recovery.

Sincerely,

Yosei Sugawara  
Southern Arizona Association for Japanese Education (SAAJE)  
908 N. Bryant Ave.  
Tucson, AZ 85711  
[sugawara@cox.net](mailto:sugawara@cox.net)

Dr. Mary Ginter  
Dr. Judy Miller  
Ernest McCray  
Renee Terry  
Thao Le  
Jeanmarie Schiller  
Michael Orr  
Tomas Tredici  
Chris Paige  
Carla Schanzenbach  
Cynthia Garcia  
Carol Ekstrom

Daniel Docks  
Hannon S. McBride-Olson  
Cheryl House  
Yosei Sugawara  
Rendokan Dojo  
Dr. Kiyono Bernier  
Lynda Thomas  
Edward & Jean Gallagher  
Jo Riester  
Mary Bonacci  
Renee Terry

Dr. Michael Samuels  
Jonathan Jasberg  
Steven Peplinski  
Christina Peterson  
Charles Shinohara  
Kathleen & Ray Green  
Peter Tredici  
Kurt & Pat Brunenkant  
Michael Zachmeier  
Martha & Robert Zinn  
Won Ho Jung

Members of the Southern Arizona Association for Japanese Education (SAAJE)  
The Tucson Japanese Speech Contest Committee  
Members of the Sonoran Science Academy – Tucson Elementary Parents' Association  
Members of the Southern Arizona Koi Association (SAKA)  
Faculty and students of Sky Islands High School  
The Ascension Lutheran Congregation  
Staff, faculty and students at Pima Community College's Northwest Campus & District Office

SAKA portion of the donation was \$227 from the 2011 Pond Tour for the Japanese Tsunami relief efforts.

## Featured Articles

### **The Facts About UV**

UV or Ultraviolet light has been used in many industries. It is used for sterilizing instruments in the medical field and for sterilizing drinking water. It has also been used for aquariums and ponds for several years for algae control. Basically there are four main components of the ultraviolet sterilizer: a germicidal lamp, a quartz sleeve to protect the lamp from the water, a ballast to provide the correct electrical requirements for the lamp, and the housing which holds all of the other parts and the water flows through it.

There are a lot of misconceptions regarding the use of UV in water gardens. One concern is that you will sterilize your pond and kill all of the beneficial bacteria. This is impossible. There is always going to be beneficial bacteria inside your biological filter and on sides and bottom and on everything else in the pond. What the UV will do, when properly sized for your pond and flow rate, is reduce some bacteria, including harmful bacteria, as well as microscopic organisms that could be harmful to your fish. It will also destroy the DNA in single cell algae cells thereby killing it very efficiently. This will provide clear water when the turbidity is due to suspended algae. A properly sized UV provides 100% success for achieving clear water from single cell algae in a pond.

While UV will provide clear water it does not filter the pond water. One concern of using UV in a pond is that some people will look at their perfectly clear pond and think that the water quality must be good for the fish. You can have clear water and still have water that would be detrimental to the fish. Always have good biological filtration along with the UV in your pond. You need the biological filter to break down the ammonia given off by the fish and to break down dead organics including the dead algae that is killed by the UV. If you don't have enough biological filtration then you may see one algae problem disappear (green water) and another one (filamentous algae) replace it. A U.V has no effect on filamentous algae, since this type of algae clings to surfaces and does not flow through the U.V unit.

When shopping for a UV you may find some confusing statements. Some companies don't even call their UVs sterilizers. They call them clarifiers. Company x says that their 25 watt UV is for ponds up to 1200 gallons and company y says that their 25 watt UV is for ponds up to 2300 gallons. What's the deal? There are actually two reasons for the discrepancy. When a UV is sized as a clarifier it may not provide crystal clear water. If a UV is sized for sterilization then you can have crystal clear water. Also, there are differences in the efficiency of the UV light from one brand to the next. 25 Watts from one company may not be as efficient as a 25 watt from another company. This is due to unit design, and lamp efficiency.

Adding a UV to your pond can provide some real benefits but get the facts prior to making your purchase and be sure to include adequate biological filtration in your pond as well.

Following is a table showing the designed capacity for Aqua Ultraviolet Lights showing the gallons that can be sterilized and gallons that can be clarified based on lamp wattage:

### Aqua Ultraviolet Lights

Wattage	Sterilize (gallons)	Clarify (gallons)
15	500	2000
25	1200	4000
40	2000	6000
57	3000	6500
80	4400	8000
120	6000	12000

## Algae Control and Ultraviolet Lights

As you may know, an ultraviolet sterilizer is one of the best ways to guarantee clear water when the clarity problem is due to single cell algae making the water green. So why would a pond that has a UV still be green? If you have a U.V. light and are having a green water problem, it should be easily fixed. You must first find the reason for the problem. Below are some possible reasons.

### First Step

First look and make sure the U.V. lamp is glowing. Your UV should have a clear portion that allows you to see if the light is burning (can be seen better at night). You should never look directly at a glowing UV lamp. If it is not working the lamp is bad, the ballast is bad, or there is an electrical problem.

### Improperly Sized UV Unit

Each ultraviolet sterilizer has a rating for the maximum pond size and the maximum flow rate it can handle. For example [Aqua Ultraviolet's 25 UV](#) will handle a pond up to 1200 gallons for sterilization, with a flow rate up to 1200 gallons per hour. The flow rate should not be exceeded. If your pump pushes more water than the unit will handle, the water flows too quickly not allowing enough time for the UV to kill the algae. The maximum pond size can be exceeded, but will reduce the clarity level. Using this 25-watt unit on a 2000-gallon pond will still have a beneficial effect, but you can't expect crystal clear water. If you are using a [brand other than Aqua Ultraviolet](#), make sure you understand their sizing. Some manufacturers use what's called a clarity rating instead of complete sterilization. This clarity rating usually means having clear water about one foot deep. Clarity ratings assume a higher number of gallons than does the sterilization rating. The Aqua Ultraviolet units are provided with both a clarity and a sterilization rating.

If going by a clarifier rating, complete clarity cannot always be expected. The term "clarifier" assumes good biological filtration and being able to see into the water (not necessarily crystal clear) to the bottom of the pond.

### **Expired Lamp**

Ultraviolet lamps don't last forever. The life of a lamp depends on the manufacturer. Lamps by Aqua Ultraviolet have a 14-month guaranteed usage life. After 14 months the lamp may still be glowing but the amount of ultraviolet light output is **significantly** reduced. Depending on your pond size and flow rate, you may still get a couple months of service life. So if your lamp is past its life expectancy and the pond is turning green it's time for a new lamp. Some brands of lamps may only last 9-12 months. However, a lamp can continue to glow and still be ineffective. It is recommended that lamps be replaced after 12 months of service.

### **Bad Ballast**

If the lamp is not burning and it is not an old lamp, then your ballast (transformer) may be bad. You should consider replacing it. A ballast can go bad due to being flooded by water, lightning strikes, or other causes of power surges.

### **Dirty Sleeve**

The sleeve that protects the lamp from the water may occasionally need to be cleaned. It may get a build-up of deposits on it that prevents the UV rays from effectively penetrating the water. On most ultraviolet sterilizers this sleeve is made of quartz because it allows more UV light to pass through it than does glass. As such it is one of the more expensive parts of the unit, so be very careful not to break it (Never put a broken sleeve back into the unit as this could also ruin the ballast and lamp.) Simply cleaning this sleeve can sometimes make a big difference in pond clarity.

Dirt can simply be wiped off with a paper towel. If the sleeve is getting a white film then this could be a mineral deposit. Using a mild acid like vinegar or diluted muratic acid will clean this.

### **Poor Placement of Pond Equipment**

This last potential problem is one of the most overlooked aspects of pond health and clarity. The intake of your pump should be as far away as possible from where the water returns to the pond. If using a submersible pump then it should be in the water on the opposite end from the water feature. If using an external pump then the water pickup should be on the end away from the water feature. If your pump intake is right by the waterfall then the rest of the water in the pond is not regularly being circulated, filtered, or sent through the ultraviolet sterilizer.

An ultraviolet sterilizer is not a necessity in a pond, but one of the most popular luxuries. While pond clarity can be accomplished with excellent biological filtration, addition of algaecides, and proper plant populations, a properly sized UV is the best way to guarantee water clarity. An ultraviolet sterilizer is NOT a replacement for mechanical or biological filtration. The U.V simply kills green water algae, which should then be removed by mechanical filtration. Failure to remove dead algae by filtration may result in dead algae floating on the water surface. A UV only makes the water clear, it does not help the general water quality. A properly balanced pond with good mechanical and biological filtration is the only way to keep a pond healthy.

*Don Harwood*

## **Beneficial Water Plants**

By David Sorenson

reprinted from [akca.org](http://akca.org)

Are there practical reasons for growing aquatic plants? Nutrition is the first reason for success in Koi aquaculture. Plants as a food supplement supply this at the lowest cost. Five plants are the most common plants in water gardening and fish love them. Grow these plants in a protected area of the pond. This will allow the plants to produce vegetation faster than the fish can devour them.

**Azolla (*Azolla Caroliniana*)** this tiny floating plant is considered the smallest of the fern family. It is sometimes confused with Duckweed but actually looks very different. Duckweed has smooth bright green leaves and Azolla has crinkly rough textured leaves that are a darker sage-green in color and that develops a reddish tinge in bright sun. The two lobed leaves overlap in rows like fish scales. Threadlike roots hang down from the undersides of the leaves.

Azolla likes sun but will tolerate some shade. It likes moist, warm air and does not do well in an aquarium. It usually will not survive the winter if temperatures fall below 50 F. It grows very fast and can become a problem in a big pond unless you can net it out regularly. If you want to cover the surface of a smaller pond fast, it is a good choice. This will give protection for small fish from birds. Azolla is used in Panama and elsewhere to carpet water surfaces to prevent mosquitoes from laying eggs. Fish like to eat Azolla when the diet is not balanced.

**Common Duckweed (*Lemna Minor*)** this floating perennial is commonly mistaken for pond scum in natural ponds. If you look closely, you will see a thick carpet of tiny, individual bright green plants which are actually very attractive. Each small leaf (about 1/8" long) is a complete rooted plant which reproduces by budding, resulting in a chain of little, massed plants. It reproduces very rapidly but will be forced out by Azolla if grown together in a small container. It is an excellent food source for Koi and they do not get tired of feeding on Duckweed. To grow Duckweed in an aquarium, you need first to keep a sufficient amount out of the reach of your fish so it can reproduce. It prefers still or very slow moving regular aquarium water, florescent grow lights, and, if possible, a sealed environment to trap humid air. It will grow year around in this environment and you will be able to take out big clumps to feed your fish. Outside it will bleach out in full, direct sun so partial shade is ideal.

**Anacharis (*Elodea*)** is the most common and easily recognized submerged aquarium plant. It is a vigorous grower in the aquarium or pond and is an excellent oxygenator. It forms dense masses of foliage which can provide hiding places for fry Anacharis has short, dark-green lance-like leaflets whirled along the entire length of the brittle, branching stem. It spreads by runners and as the plant extends itself, the growth at the older end becomes yellow and loses leaves. This old growth can be pinched off leaving the healthy new growth Anacharis may flower for you. These will be charming 1/4" white floating flowers on threadlike stems. Anacharis is very easy to grow and does not seem to have any special requirements except sufficient light. It grows better in potted soil or just left floating to form long roots that trail down in search of soil to anchor the plant. It needs to be brought inside from a pond at the end of the summer. The temperature should be no lower than 5 celcius to live through the winter.

**Water Ilyacinth (*Eichhomia Crassipes*)** is a tropical floating plant with long, hanging roots which are the instinctively favorite spawning material of Koi and goldfish. Fortunately it is also a beautiful plant. The shiny green leaves are on air-filled bulbous stems which are also filled with a spongy material that keeps the plants afloat. These leaves and stems spray outward from the center of the plant in a rosette shape. The Water Hyacinths flowers are similar to the Land Hyacinth. They look like a little purple orchid on a long stem coming from the center of the plant. The plants will flower more frequently if the roots touch bottom sediments.

Water Hyacinths need full sun. Each plant is 10"-12" tall. They are perennials. They can be wintered over indoors but they are fussy. They need lots of light, and moist air. Propagation is by runners at the water surface and is rapid. These are among the fastest growing plants in the world. In tropical areas they have clogged waterways and stopped navigation on rivers . Luckily, this should not be a problem in your pond unless you have a very large or natural pond.

Water Hyacinths pull nutrients out of the water at such a rate that they have been introduced in many areas to clean up foul, stagnant water. Water reclamation plants are experimenting with ammonia directly

**Water Cress (*Nasturtium Officinale*)** is a hardy annual that grows naturally in the soil on the banks of cool to cold streams and spring-fed ponds. It can be found all winter long in unfrozen, sheltered areas. This is the same Water Cress that is sold in grocery stores and used in restaurants. You can eat the leaves and stems that you grow. They have a very peppery taste. Waterfowl eat it and fish like it also. The small floating leaves are rounded, dark green and waxy. The branching stems can spread out for 2'-3' over the surface. Slender roots hang down from the nodes of the stems. It is a very good oxygenator. It develops many small white flowers over the growing season. Plant in garden soil and put the pot by the edge of your pond with a couple of inches of water over the pot. It will do fine in an area of moving water. Water Cress will quickly form a mass of foliage and can outgrow a small pot within two months. You may see the root mass growing over the surface of the soil then as they take in growth of the plant may slow and become scraggly. Either re-pot the plant in a larger pot or chop out a big chunk of the plant and the root mass then fill the hole in with soil. Water Cress tolerates sun, shade or partial shade equally well. It is easily grown from the tiny seeds found at any gardening center that has a decent seed selection. It is also a prolific re-seeder and will re-sow itself yearly. You can also start it from a freshly purchased bunch at the produce section of the grocery store. Make sure you can see the fine white roots on some of the stalks... Push these into wet soil and soon you will have enough Water Cress for all of the salads and sandwiches you could possibly want.

### Kawarigoi Korner



[Click Here](#) to see new items for sale on the SAKA Website.

If you have suggestions for the newsletter or items to be included in Karawagoi Corner or the Calendar, Please contact Brent VanKoeving at 520.780.3980 or [bvankoeving@longrealty.com](mailto:bvankoeving@longrealty.com).

### Upcoming SAKA Education and Business Meetings

<b>Date</b>	<b>Location</b>
<b>July 24, 2011</b>	Michael and Carol Herndon
<b>August 28, 2011</b>	Curt and Lisa Ogren. Mountain View Koi.
<b>September 25, 2011</b>	
<b>October 23, 2011</b>	
<b>November</b>	No Meeting. See you at the Show.
<b>December</b>	

## Shows, Pond Tours and Seminars

Event	Dates/Location/Links
November 11-13, 2011	Annual SAKA Koi Show Sam Lena Park



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<http://www.sakoiia.org>  
 Annual Membership

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***Membership Type***

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 \_\_\_ New Member

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State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone #: \_\_\_\_\_

E-mail \_\_\_\_\_

Today's Date: \_\_\_\_\_

# of Koi \_\_\_\_\_

Years Keeping Koi: \_\_\_\_\_

Pond size: \_\_\_\_\_

Would you like to host a meeting?  
 \_\_\_\_\_

Would you like to serve on a committee?  
 \_\_\_\_\_

\_\_\_ If yes which one?  
 \_\_\_\_\_

**Make Checks payable to: SAKA, Inc.**

Mail to: Martha and Dan Cover  
 2841 W. Puccini Place  
 Tucson, AZ 85741