



Exciting Start to the Year Discussed at General Meeting AND WE NEED YOUR HELP

The first 2016 General Meeting of ACE was held on February 27, 2016. Presiding was Donna Mayer Todd, newly chosen president of ACE. She and the board promised the membership a one hour meeting, and they were able to complete the meeting under the maximum time. How it was accomplished must have been due to all board members and committee chairs ready with their presentations that timed out to the allocated time on the agenda.

The first order of business was to introduce the two new board members who will serve one-year terms due to a resignation. Welcome **Leslie Martin** and **K.C. Thyne** to the 2016 ACE board, bringing the total board to 8 people.

The minutes were sent by email to the membership on March 5, so we will not duplicate here. **Apes in the Arts** and **Gorilla Golf** will be back again with some new plans to make the events fresh and fun.

Run for the Redheads 5K will take 2016 off to reorganize. This could be a profitable annual event, but we need a creative way to revamp this. [Anyone who would like to work on this, please let any board member know.](#) It's time to get started now to make 2017 Run for the Redheads a huge success.

Several new projects and fundraisers were discussed. The interest is high, and signing up to help began at the

meeting. It continued online after the minutes were distributed to all members. [If you are interested in any of the projects, please contact info@apeconservationeffort.org.](#) The committee chairs will be notified of your desire to help and will contact you about upcoming meetings and information.

Some of the new ideas are:

-  **Acro for Apes jams**
-  **Great Stuff for Great Apes yard sale**
-  **Ping Pong for Pongos**
-  **Bingo Night for Bonobos**
-  **Georgia Gives Day, November 17, 2016**

Several times ACE has been asked to give presentations for school groups and civic clubs. We are thrilled to share our information about our mission, great apes, palm oil, and more. But the time has come to create a program and materials that will present ACE as a professional organization with points to cover for groups of different ages

and interests. [If you would like to help with this education outreach project, please contact Jane Barron.](#)



Time to "Tee Up" for Gorilla Golf

by Susan Smith

Ape Conservation Effort's sixth annual Gorilla Golf Tournament will take place on **Tuesday, September 27, 2016**, at the Brookfield Country club in Roswell. This event has been very successful for the past five years raising over \$66,000 for the Dian Fossey Gorilla Fund International. There are several ways that you can assist in making this year's event even more successful:

- **Recruit golfers** - Ask friends, family, co-workers who like to golf to join us for a fun day of golf, food & beverages, prizes and a raffle. For more information or to sign up to play, contact gorillagolf@apeconservationeffort.org.
- **Sponsor golfers** - Each golfer will raise a minimum of \$500 through sponsorships. By sponsoring a golfer, at any monetary level, you help them reach their goal and it is all tax deductible.

- **Sign up Hole Sponsors** - Individuals and/or businesses can make a \$100 tax deductible donation to purchase a sign with the donor's name to be placed on one of the holes on the course for all golfers to see. This is a great way for individuals and/or businesses to show their support and contribute to this event.

- **Contribute to the raffle** - A fun part of this event is the raffle held at the end of the tournament. Golfers purchase raffle tickets to win some great donated items. You can contribute to this raffle by donating items such as wine/liquor, bar accessories, event tickets, sporting apparel, sporting accessories, etc. For information or to donate items, contact Jane Barron at info@apeconservationeffort.org.

Come rain or shine, our golfers will "tee up" on September 27th for a great day of golf and to help save gorillas in the wild. If you have questions or need more information about the event, contact Jodi Carrigan (Gorilla Golf Chair) or Susan Smith (Co-Chair) at gorillagolf@apeconservationeffort.org.



Apes in the Arts is on for November 5, 2016!

by Lori Kirkland

Because of the success of last year's show, the ACE board is happy to hold the event again. The non-profit great ape group to benefit from the proceeds has yet to be determined by the voting members.

As in the past the ape artwork is sold at silent auction at a fun gathering place with finger foods, beverages, and music.

Last year I presented a new idea of having human artists paint, draw, create their interpretation of an ape painting, and the paintings were auctioned off as side-by-side pieces.

This year there will be a slightly different twist on the artwork. The human artists will use what the apes paint and together create a finished collaborative piece on the same canvas!!

Once again we urge you to get involved with the old and new events. They will be more fun and successful with your help. **Voting and non-voting members can work on committees.** Please let us know that you will help. The more help we have, the more money we raise and the more great apes we can help.

[Contact us on how you can participate at info@apeconservationeffort.org](#)



Constance Palmer, owner of The Space: A Movement Arts Studio in Smyrna, has graciously agreed to host our event again this year! This means that there will be beautiful aerial and circus-like acts at the Apes in the Arts show - everything from Aerial Fabric to a fusion dance of acrobatics and pole dance, happening right along side the art auction!

Human artists needed.

The event is still in need of some more human artists. My goal is to have at least 20 different paintings to go up for auction. If anyone knows of artists who might be interested, please send me the person's contact info, and maybe a link to their site.

Interesting and cool ideas.

If anyone has any ideas on how to make this year's event even more interesting and cool, please don't be afraid to email me. I'm totally open to suggestions.

Staffing the event.

I know that we will need assistance on the day for set up and break down, so if anyone wants to come help for a few hours, and see some really cool acts, just let me know.

Know a DJ?

I'm also currently looking for a DJ that would be willing to help run the event. If you have a DJ contact, please send it my way.

I can't wait to see what the artists - human and ape alike - create!

Contact me at info@apeconservationeffort.org

For more information on *The Space*, see: www.thespaceatl.com.

The Lost World

"The insatiable global hunger for palm oil and timber are closing in on Borneo's last hunter-gatherers and their ancient way of life."

by Alex Shoumatoff
Smithsonian, March 2016

And so begins an interesting article about the author's trip to Borneo to study the Penan, one of the 20 or so tribes of the Orang Ulu, who live in the mountainous jungle of Borneo's interior. The fate of these indigenous people is bleak as is the fate of the orangutan also found here. Please examine the article for more details about the indigenous tribes. However, there are two

excerpts that are particularly interesting to ACE members regarding palm oil and orangutan survival. These excerpts below are Code Orange and The Palm Oil Paradox.

Code Orange

by Alex Shoumatoff

"During my first trip to Borneo, I visited Birute Galdikas, the Canadian-born primatologist. One night at dinner, a furry orange hand quietly unlatched the door. An orangutan named Kristin sat down, tucked a napkin under her chin and started spooning up soup. As we chatted, Kristin gave each speaker her undivided attention. When she finished eating, she folded her napkin, put down her utensil, and let herself out. Galdikas, who has spent more than 40 years trying to save the orangutan apes, told me Kristin had picked up these manners on her own, through observing humans.

There hasn't been a thorough census of wild Bornean orangutans since 2004 - at that time, there were 54,000 and the number has almost certainly dropped with the spread of logging and oil palm plantations. "You could easily fit them all within one big sports stadium," says Mark Harrison, managing director of the Orangutan Tropical Peatland Project.

He estimates that last year's agricultural fires, which raged unchecked for months, killed more than 2,000 orangutans. Many suffocated, while others died of starvation. Still others fled to villages, where they were attacked by locals. "What is very clear," says Harrison, "is that the population is in sharp decline."



Oil palm

The Palm Oil Paradox

It's destroying the rainforests, but boycotting isn't the answer.

by Joe Fassler

"The \$40 billion palm oil industry is notorious for wiping out rainforests, displacing indigenous peoples, spewing carbon into the atmosphere and driving the orangutan and other animals toward extinction. But consumers who want to avoid palm oil have an almost impossible task because it's in everything from ice cream to instant ramen, toothpaste to lipstick. And it's increasingly apparent that even if they could boycott the stuff that might not be so wise. As destructive as the oil palm is to the environment, it may be

better than the alternatives. No other crop can yield even a third as much oil per acre planted. And along with using less land, the oil palm gobbles up significantly fewer pesticides and chemical fertilizers than coconut, corn or any other vegetable oil source.

Palm oil's big problem has always been the jungle-covered terrain where the tree is grown. It's native to Africa, but Malaysia and Indonesia now produce 86 percent of the world's supply. Clearing land for plantations involves burning rainforest - in the process, endangering rare species and, on peatland, releasing 100 times the greenhouse gas of conventional forest fires. And demand is growing. By 2022, the global market is expected to more than double in value to \$88 billion.

Environmental groups have pushed for change. Under pressure from Greenpeace the world's largest palm oil trader, Wilmar International, signed a 100 percent zero-deforestation agreement in 2013. Public outcry also moved the European Union to change the labeling laws in 2014, making it easier to spot palm oil on ingredient lists. (The US has required labeling of specific oils since 1976.) Concerned buyers can also look for a seal of

approval from the Roundtable on Sustainable Palm Oil (RSPO). Some critics argue that the RSPO, founded in 2004 by industry leaders, doesn't go far enough. Its standards forbid deforestation only in "high conservation value areas," a term that has no legal definition. And a trader who earns an RSPO certification can go on to mix "clean" and uncertified oil. What's more, the world's largest palm oil markets are in India, China and Indonesia, where most consumers, who use it for cooking, may not even be aware of such options.

Still, more big food companies are getting the message. On its 2015 sustainable palm oil scorecard, the Union of Concerned Scientists gave high ratings to such companies as Gerber, Kellogg's, Unilever, General Mills, PepsiCo, Dunkin' Donuts and Safeway. Environmental NGOs ultimately hope to see oil palm growers planting on already-deforested land. In the meantime, they warn against boycotting palm oil altogether. "That would mean shifting problems onto another commodity," say Katie McCoy, the head of forest programs at CDP (formerly the Carbon Disclosure Project). Moreover, from a health perspective, palm oil is the ideal substitute for

partially hydrogenated oils, the "trans-fats: that food processors love and health experts hate. Palm oil is semisolid at room temperature and can stay stable for long periods without going rancid. Sustainable palm oil may be elusive, but it's possible - and in fact, it may even be necessary for the planet's healthy future."



Greetings from the Research Committee

by Gene Todd

With a brand new year and board, we are off to a good start.

The Research Committee has reached out to the different organizations receiving ACE donations in hope to get some reports back from the field as to how our donations are being utilized and any photographs they could share with us.

As of this writing, I am pleased to say that Richard Zimmerman of Orangutan Outreach has responded with good news regarding a couple of projects.

(Orangutan Outreach is a New York based 501(c)3

non-profit with on-going projects in Sumatra and Borneo for the survival of wild orangutans and their habitats. ACE has been able to send donations to them that are used for SOCP and BOS programs.)



photo by: Orangutan Outreach

In 2014-2015 we helped Sumatran Orangutan Conservation Programme (SOCP) build a new Baby House for orphan orangutan babies. New funds will help SOCP build a new Jungle School - the next step before releasing babies back into the wild.



photo by: Orangutan Outreach

Due to the horrible fires in Borneo in 2015, a campaign was launched to build a new Baby House at Bornean Orangutan Survival Foundation Nyaru Menteng (BOS). To see the campaign, you can

visit
www.redapes.org/bos.

Orangutan Outreach wants to promote Ape Conservation Effort (ACE) on their website with our logo, ACE information positioned prominently at the top of their Sponsor and Affiliates page, and a link to our site. In conjunction with that, Rich would like ACE to place a link to Orangutan Outreach on our website for all interested parties.

In conclusion, Rich ended his letter with: "Thanks for all your support! We are all very grateful. Best wishes and hello to all the amazing redheads at Zoo Atlanta."

We hope to have more updates and photos from the field in future issues of *Heard It Through The Ape Vine*.



photo by Orangutan Outreach

Scientists reveal revolutionary palm oil alternative: yeast

by Oliver Balch,
The Guardian,
February 17, 2016

A little-known yeast historically used in South Africa's wine industry could revolutionize the food and cosmetics industries, and help halt deforestation.

The ubiquity of palm oil, which appears in everything from margarine to lipstick, is now widely recognized. So too are the detrimental effects of palm oil plantations on the world's remaining rainforests. So why do we keep using it?

The simple answer is it's just too good at what it does. Its versatility comes down to two main stellar properties: an exceptionally high melting point and very high saturation levels. Some vegetable oils get close to one or the two, but none to both.

Now researchers at the University of Bath believe they may have hit on an alternative: yeast. A three-year research programme between the university's biochemistry and chemical engineering faculties has successfully

cultivated an oily yeast that matches palm oil's key properties almost identically.

Early laboratory tests in a shake flask show that the yeast *Metschnikowia pulcherrima* - historically known for its use in South Africa's wine industry - can produce up to 20 grams per litre of oil, giving it a similar lipid profile to palm oil. Among its other selling points, *M pulcherrima* can be found pretty much anywhere, including on a huge variety of tree leaves, fruits and flowers. Initial bio-prospecting efforts have turned up strains in Vietnam, South Africa, Italy, France - and fortuitously even on the University of Bath's own campus.

Another singularity of *M pulcherrima* is its ability to grow on pretty much any organic feedstock. It's hoped that waste from the process can feasibly be recycled as a feedstock as well, helping close the loop in the supply chain. "Irrespective of what you are putting in at the start, whether it's rapeseed, straw or waste food, *M pulcherrima* can use the sugars in it and grow on it," says Dr. Chris Chuck, research fellow at Bath's Centre for Sustainable Chemical Technologies and co-lead on the project. Chuck estimates that the land use requirement for commercial yeast production could be 10 or

even 100 times less than palm oil.

That will please those concerned about food security as well as the environment, because palm oil plantations are not only credited with widespread deforestation - their ubiquity in tropical regions is also blamed for occupying agricultural land and pushing up food prices as a result.

"Technologies which can produce useable oil from waste and so don't compete for dedicated farmland look much more promising, and this work appears to bring one of those technologies closer to reality," says Dr. Doug Parr, chief scientist at Greenpeace UK.

From lab to plate

Such optimism doesn't come without several notes of caution, however. For starters, yeast would not be the first palm oil alternative to have been tried and found wanting. Examples include oils based on algae or plants grown on marginal land, such as *Jatropha curcas*. Despite some niche applications, bringing these options to scale and matching palm oil's lipid-capacity have proved steps too far to date.

"It's still early days," notes Parr with respect to a yeast-based solution. "Commercialisation can reveal environmental and practical problems which

were missed at the small scale."

M pulcherrimas' researchers admit that the road is a long one from lab tests to industrial production. Unanswered questions include what the most sustainable and financially viable culture to produce the yeast on is, how to protect the yeast against bugs and other so-called inhibitors, and how to maintain high saturate levels.

The good news is that early tests in a one litre bioreactor provide a degree of confidence. Unlike other yeasts, *M pulcherrima* is found to be very tolerant to inhibitors. Initial research also shows it can grow at pH levels ranging from 1.9 to as high as nine. From an environmental perspective, experiments show that the yeast is able to grow at temperatures of between 12-30C, meaning energy inputs for heating and cooling can be kept low.

M pulcherrima can also use solubilised carbohydrate feedstock to ferment, meaning that the feed does not need to be broken down into sugars by additional enzymes. "Growing the enzymes is extremely expensive, so if we can replace that with a chemical process then that would be a big step," says Chuck.

This raises the knotty question of whether yeast can ever compete with palm oil on cost. To be viable, the yeast process would ideally range between \$800-\$900 (£521-586) per tonne, says Chuck, citing recent palm oil trading values. To day, the closest comparable estimate is for yeasts cultured on dry plant matter, which researchers in China believe could produce oil at \$1,200 per tonne (PDF). "There is a way to go yet," conceded Chuck.

In coming months, the researchers at the University of Bath will begin scaling up their experiments. Tests of the innovative yeast-based process are next scheduled for bioreactors with a capacity of 30-50 litres, expanding to 10,000 litres by the end of this year.

If successful, it is hoped that the solution could be ready for commercial expansions in three to four years. The palm oil industry won't realistically consider jumping ship just yet. That said, an undisclosed UK chemicals manufacturer is part-funding the research. If future experiments with *M pulcherrima* continue on their current trajectory, more funding will undoubtedly follow.

(The palm oil debate is funded by the Roundtable

on Sustainable Palm Oil. All content is editorially independent except for pieces labeled advertisement feature.)

www.theguardian.com/sustainable-business/2015/feb/17/...2/23/2016



Did you know?



photo by DFGFI

What's special about a gorilla's brain?

"One study published in 2015, co-authored by Fossey Fund President and CEO/Chief Scientific Officer Tara Stoinski, Ph.D., looked at variations in brain structure between eastern and western species of gorillas. The researchers examined MRIs of brains from 18 captive western lowland gorillas, 15 wild mountain gorillas and three Grauer's gorillas (all of whom had died of natural causes), to look for differences that might be related to how the species differ.

Such differences were indeed found in several parts of the brain, which may explain the varied development among these types of gorillas and help us understand how environmental factors, such as the distribution of food, influence the evolution of brain structures."

Excerpt from: "Gorilla Science leads to new insights," *DFGFI Gorilla Journal*, March 2016



More Sumatran orangutans than previously though March 4, 2016

Sumatran orangutans, one of the two existing species of orangutans, live exclusively in the North of the Indonesian island Sumatra and are critically endangered. This ape is threatened by poaching and forest loss, as its habitat is being converted for agricultural purposes. An international team of researchers has now conducted an extensive series of surveys to estimate the number of Sumatran orangutans. They discovered that about 14,600 of these animals still live in the wild today - 8,000 more than previously thought. Good news, however, the increase in numbers is due to a more wide-

avoided or reduced to a minimum."

<http://m.phys.org/news/2016-03-sumatran-orangutans-precious...3/18/2016>

ranging survey effort and not to an increase in the orangutan population. Moreover, should the deforestation of the orang's habitat go ahead as planned, as many as 4,500 individuals could vanish by 2030.

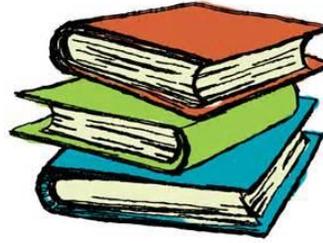
"It was very exciting to find out that there are more Sumatran orangutans than we thought, but this does not mean that we can be complacent," says Serge Wich of Liverpool John Moores University. "Numerous development projects are planned in the area that - if they are not stopped - could sharply reduce the number of orangutans over the coming years."

Wich adds: "We will need to continue to work together with the Indonesian government and other parties to ensure that this scenario will not happen. A difficult task, but we all hope that we can turn the tide for the Sumatran orangutan. We would like to see appropriate environmental impact assessments conducted for all developmental planning that concerns forests in the orangutan range so that disruption to their habitat may be

In Memoriam

Ruth Dickinson, friend of Polly Heyward, February 2016

Ron Matonak, husband of Belinda Matonak, March 2016



Book Review

The Zoo Atlanta gift shop has a nice selection of books about animals. Some of these will be useful in building our new Education Program outreach.

Primate School

by Jennifer Keats Curtis with Lincoln Park Zoo, Nashville Zoo, Oakland Zoo, Orangutan Outreach, and Zoo Atlanta

This book is written for ages 4-8. The information is basic and easy to understand and the pictures of working with great apes in zoo settings are very good. ACE member Jodi Carrigan is shown in one photo working with a gorilla for a blood sample.

The Chimpanzee Children of Gombe

by Jane Goodall

This book is written for the young reader and has wonderful pictures by Michael Neugebauer. Jane Goodall is the narrator taking the reader through a day watching chimpanzees at Gombe, and she compares

emotions and activities with human children. Actually she explains that the "day" represents her 50 years working at Gombe National Park.

Both of these books would make wonderful gifts for young readers.

2016 ACE Board

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Vice President - Lynn Yakubinis

Secretary - Jane Barron

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Board members at large:

Lori Kirkland

Leslie Martin

K.C. Thyne

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APE CONSERVATION EFFORT

6th Annual

GORILLA GOLF TOURNAMENT

TUESDAY, SEPTEMBER 27TH, 2016

REGISTRATION BEGINS AT 9:15 A.M. • SHOT GUN START AT 10:00 A.M.

BROOKFIELD COUNTRY CLUB

100 Willow Run • Roswell, GA 30075

www.brookfieldcountryclub.com

This event will be played like a golf-a-thon.
Each Participant must raise a minimum of
\$500.00 in sponsorships.

UNIQUE AWARDS

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& Closest to the Gorilla Contest



Enjoy a day of
All Inclusive Golf
including:
Continental Breakfast
and
Buffet Lunch!
All Beverages Included

Proceeds from the tournament will support The Dian Fossey Gorilla Fund International

For more information and registration visit www.apeconservationeffort.org

Call 404-427-4998 or e-mail gorillagolf@apeconservationeffort.org

