67th AFEC well attended

The latest IEHA Annual Fall Educational Conference has ended with high marks by attendees. Nearly 200 registrants listened to general session speakers, then had the choice of attending one of three breakout sessions Monday and Tuesday afternoons.

Monday morning started with a welcome by IEHA President Patty Nocek (left) and conference chair Jason Ravenscroft (right). Lawrenceburg Mayor Kelly Mollaun (below left) invited attendees to explore his city while attending the conference. He told how Lawrenceburg and Dearborn County continue to grow.

Bruno Pigott, Commissioner of the Indiana Department of Environmental Management gave the keynote address. Commissioner Pigott noted the conference theme, “Evidence-based Practice” is a tool to be used and IDEM does that. He noted that the medical field integrates experience and research to treat patients. He said decisions are scientifically based, and encouraged the use of “best management practices.”

(More conference highlights inside.)

“The conference theme ‘Evidence-based Practice’ is a tool to be used, and IDEM does that, as does the medical field when it integrates experience and research to treat patients.”

- Bruno Pigott

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From the IEHA President

On January 1, 2018, I will no longer preside over the IEHA board meetings. The association’s top leadership role will be placed into the capable hands of Jason Ravenscroft. That day will arrive soon, thus, it is time for me to personally reflect back on the goals I had set for myself as the IEHA face and lead representative in 2017. I had four goals, and I’m happy to report (especially to myself) that I accomplished all four with dialogue and support from the board:

- Take the association into a social media space. **CHECK.** The association now has an official Facebook page with 92 followers. I have found by managing this page that if nothing else it is a great place to post our conference pictures, support our conference exhibitors and support chapter/committee activities. Many members seem to be enjoying the page.
- Evaluate association insurance coverage and costs. **CHECK.** Coverage was evaluated via a 3-quote system familiar to many at the government level. The process took about 7 months to finalize. I’m happy to report that the association will realize a few hundred dollar savings **even with** a new Wild Apricot/Digicert website security cost that the board felt was important to invest in for our membership, and I agreed.
- Evaluate association financials specific to maximizing our investment opportunities. **CHECK.** With some research and fund movement, the association is realizing better interest performance with stable no-risk investment changes. This specific growth is enhancing our capital and scholarship funds. I would like to thank Gretchen Quirk and Margaret Voyles for their assistance in this endeavor.
- Create a surplus from my 2016 fall conference without drawing down the conference account set-up by previous conference chairs. **CHECK.** It was clearly explained prior to my conference that the conference account had been created in case an unforeseen emergency descended upon a conference. In other words, money can’t be used for food or entertainment. I thank those before me who started the account because it certainly does bring some peace of mind when signing conference contracts!

If my last message reads “It’s all about me!” then my message is not reading well. None of the above would have been possible without the support and assistance of many current and past IEHA members who work countless hours for the association membership as unpaid volunteers. Thank you.

**Patty**

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From the Ed Desk

Another Journal is here! Please continue to send ideas and articles. Since interest in the flip page version seems to be steadily declining, that format may be discontinued.

Can you guess what time the picture to the left was taken? Bonus points if you can guess the day!

**Ed**

The Bicentennial Monument overlooked the Ohio River and the conference.
Water, water, everywhere

The Union of Concerned Scientists (UCS) has analyzed the future impacts of sea levels rising. It concluded that some areas are already inundated with flooding more than 26 times per year that renders more than 10% of usable land inundated.

Their conclusion is that by 2035, nearly 170 communities - twice that of today - will face a constant flooding threat. By 2060, the number increases to 490, and by 2100, nearly 500 communities, including about 40% of all oceanfront properties along the east and gulf coasts. If the situation change is worse than average, the number of affected communities may rise to well over 600.

UCS concedes that it may be too late to reverse the climate change, but immediate action might succeed in slowing the acceleration of sea level rise, saving several hundred communities.

Sea level rise threatens coasts

The Union of Concerned Scientists (UCS) believes it might be time to sound the alarm about the rising sea levels. In a recent issue of Catalyst, author Pamela Worth pointed out that coastal communities have already seen how flooding increasingly intrudes on peoples’ daily lives. She says in the decades ahead millions more people will feel the effects or watch the results directly. This will force coastal communities to make difficult and costly choices, says UCS.

The National Oceanic and Atmospheric Administration (NOAA) says the sea level is rising about one eighth inch per year. That may not seem like much until one realizes that about 40% of the country’s population lives in flood prone coastal areas along the Eastern coast, around Florida, and along the Gulf coast. This includes Miami. The rising water will eventually impact over 600 coastal communities. The water level rise is made worse by high tides and storm surges.

A lot of communities will face constant flooding by 2035, and it will only get worse until many will be largely underwater by 2100 when the seas are expected to be about four feet higher globally. How quickly this happens depends upon how quickly we act, believes UCS. The organization believes that it likely is too late to stop sea level rise, but we might slow the changes, sparing some coastal communities. Slowing the artic ice melt by controlling carbon emissions will buy time, they believe.
Accreditation in your future?

Public health accreditation - should your health department strive to achieve it? David Stone, Education Specialist with the Public Health Accreditation Board (PHAB), says, it’s not just more work, but it can be an accurate way to measure the effectiveness of the local department. If a department attempts accreditation but doesn’t make it, an “action plan” will be created to help the local department meet the goal.

Why accreditation?

David says the goal of voluntary national accreditation program will “improve and protect the health of the public, advancing and ultimately transforming the quality and performance of public health departments” at all levels. David added that he can’t sell someone on accreditation but the department has to want it.

There are multiple steps to the process including some preparation prior to applying and this includes supplying numerous documents. There will be a site visit from someone representing the PHAB. David added that the process takes awhile and there is a significant fee required, which is based upon the population of the jurisdiction. But he adds that almost every department that completed the process said it was worth the time and effort it took to achieve accreditation.

Mosquito surveillance is “robust”

Those words from Dr. Jennifer Brown, State Public Health Veterinarian at ISDH, illustrated the importance that is placed on tracking mosquito populations within Indiana. She told attendees at the recent IEHA Fall Educational Conference that the state surveillance program is the nation’s most robust.

Surveillance, she added, can allow two weeks to “get the word out” if disease-carrying mosquito populations are found. Most people are aware of West Nile virus, but she said that ISDH is now looking for evidence of LaCross virus in mosquitoes and Lyme Disease in ticks. Dr. Brown said that LaCross virus is worse for young people, just the opposite of West Nile virus.

“Anyone could be a victim of Lyme Disease in Indiana,” she said, as cases have increased. It takes a little time for tick borne diseases to be transmitted, but often one does not realize they’ve been attacked, especially kids.

She said that Zika is far less likely now and prior travel restrictions have been eased. Once infected, one becomes immune to Zika.
IEHA extends appreciation

IEHA members have been assisting with requests sent to IEHA. President Patty Nocek says “Thank You” to the following members:

Amanda Lahners, Environmental Health Supervisor La Porte County Health Dept. assisted Purdue Climate Change Research Center on “Efforts to document the impacts of climate change across Indiana.”

Mike Mettler, Environmental Health Director with ISDH assisted with a questionnaire for NEHA & a MPH student on “How core Environmental Health services are delivered in the US and its Territories.”

Jason Ravenscroft, IEHA President-Elect assisted with a questionnaire for NEHA as NEHA plans for the affiliate workshop at the 2018 NEHA Conference.

Nicole Stone, Infectious Disease Epidemiologist with ISDH responding to a survey for NEHA & a Colorado School of Public Health student on “The role of EH in Legionella prevention and outbreak investigations.”

One of the awards presented during the Annual Fall Educational Conference was the “NEHA Affiliate Certificate of Merit” shown above. IEHA President Patty Nocek presented the award to Margaret Voyles and the LaPorte Co. Health Dept.

Speakers talk environment

Where do safe exposure limits to toxic chemicals come from? Dr. Indra Frank, Environmental Health and Policy Director at the Hoosier Environmental Council attempted to shed light on this topic for recent attendees of the IEHA Annual Fall Educational Conference. She said that “risk assessments” are done to determine a safe level of exposure to a given chemical. “At what level can we expect a toxic response?” she asked. “What level could we be exposed to daily without a toxic response?”

She added that some chemicals have no safe level of exposure, like lead.

More information may be found at www.hecweb.org

Dr. Fuyuen Y. Yip, Acting Branch Chief and Captain in the U.S. Public Health Service Environmental Health Tracking Branch with the CDC, showed conference attendees the latest environmental health tracking software that is available for local health departments to use. The software is complex, Capt. Yip explained, in that it allows layers of data to be included in maps, and that searches can be done for various parameters, like a certain date range, or specific environmental concerns.

She added that data collected on pollution is presented in such a way that it provides a solid presentation to legislators that can lead to positive legislation. Find out more at www.cdc.gov/ephtracking

Photo credits in this issue to Brian Price, Jennifer Rugenstein or Ed Norris, unless otherwise noted.
PFAS: public health threat?

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are in hundreds of industrial and commercial products from leather products to paper and packaging to cookware, and firefighting foam. PFAS will make a product more resistant to soil, water, and stains. They keep packages from sticking to food, and can be used to fight fires where petroleum products are at risk. The chemicals are made and not found naturally in the environment. They do not break down when exposed to air, water, or sunlight.

Even though these chemicals are not new, there are few regulations governing their use. No states currently regulate PFAS, but their use in the U.S. has been ceased.

Human health effects largely unknown

Although their worldwide uses are diminishing, PFAS have been used for many years and residues can travel thousands of miles. According to the US EPA, monitoring as far away as the Arctic has shown PFAS to be present in the air, water, and in living organisms. The EPA says exposure risks remain even though the U.S. no longer allows PFAS to be made, because what residue remains can travel worldwide.

What are the risks?

The CDC says that human health risks are not well understood, but animal studies have found that high exposures resulted in changes in thyroid, liver, pancreas functions, and hormone levels. Tests show that risks to humans may affect a developing fetus leading to changes in growth, learning and behavior. It may also affect the immune system and increase cancer risk.

PFAS have been found in blood samples in people all over the world, and a safe level is not clearly known. Efforts to remove PFAS from products is ongoing, but exposure to past residual amounts will remain. One should avoid drinking any water suspected of PFAS contaminates.
Attendees at the recent IEHA Annual Fall Educational Conference listened to Dr. Todd A. Thompson, Director and State Geologist with the Indiana Geological and Water Survey explain the map layer tools available on line, and how they are used.

Dr. Thompson explained how layers of information may be placed on maps to show various environmental data, governmental jurisdictions, geology, hydrology, and more. Check it out on line at www.map.indiana.edu. Information is updated when possible and there is no cost to access.

“Indiana Map” great free tool

Silent Auction a success

More than a thousand dollars was raised from the Annual Fall Educational Conference’s Silent Auction. The silent auction committee chairs Patty Nocek and Margaret Voyles offered their thanks to the following who donated or had winning bids (or both).

Dave McSwane, Ed & Sue Norris, Reba Taylor-Hill, Margaret Voyles, Judy Fox, Southern Chapter, Ellie Hansotte, Linda Briles, Jennifer Asbury, Amanda Lahners, Patty Nocek, Deb Gardner, Denise Wright, Joe Rakczozy, and Brenda Cummins.

Also thanks goes to Dana Taylor, JoAnn Xiong-Mercado, Tami Hurlbart, Eric Kaufman, Jennifer Warner, Rosy Hansell, Linda Caldwell, Tricia Wozniak, Southeastern Chapter, Richard Rider, Wabash Valley Chapter, Carrie Allen, Alice Quinn, Alicia VanEe, Jennifer Heller-Rugenstein.

Thanks to Southern Chapter, East Central Chapter, Tami Barrett, Sharon Pattee, Sylvia Garrison, Gary Steinhardt, Stanley Danao, West Central Chapter, Robert Lewis, Mike Mettler, Suzanne Mouser, Christine Stinson, Amy Barlow, Carrie Allen, Magan Meade, and one anonymous donator.
St. Meinrad Archabbey toured

Members of Southern Chapter recently got an up-close look at the St. Meinrad Archabbey in the small town of St. Meinrad, including a look at the facility’s wastewater treatment plant. The Archabbey is a community of Roman Catholic Benedictine Monks. Brother Gene led the tour that began near the cathedral and described the first monks to visit the area and traditions they observe. He showed a set of double doors made of wood on the end of the building where the novice monks petition to join the order are finally admitted and accepted. These doors are also where the monks who have passed on are brought out for burial, usually in the cemetery onsite, with matching stone crosses on the graves.

Members noted the elaborate stained glass windows and painted icons, and viewed some “amazing” paintings on the ceiling and walls in the Charter Room, a place to hold meetings.

Wastewater lagoons handle effluent

The group carpooled to the wastewater lagoons for the abbey, which also handles wastewater for the community of St. Meinrad. Physical Facilities Manager Andy Hagedorn and Wastewater Manager Scott Fields were on hand to field questions and explain the operation. Of interest was the open concrete area where effluent entered the lagoon system. Members saw one of the lift stations where effluent screening is done prior to entering the lagoon system and the diversion area where processed effluent was let into a nearby river.

Lagoons, wildlife

Lagoons host a thriving variety of turtles, fish, frogs, snakes, and some geese. Duckweed that partially covers the water is not removed as it eventually sinks to become part of the bottom sludge.

The tour concluded with lunch at the guest house.

(Contributed by Jennifer Rugenstein)
Officers named for 2018

Here are the Officers to serve IEHA for 2018.

Jason Ravenscroft – President,
JoAnn Xiong-Mercado – President Elect,
Jamie Bane – Vice President,
Kelli Whiting – Secretary,
Gretchen Quirk – Treasurer,
Jennifer Warner and Tara Renner – Auditors.
Patty Nocek – Past President,

A storm surge and flooding can cause more damage than winds with a hurricane.

INEHRT offers aid to Texas

In the aftermath of Hurricane Harvey’s destructive path through southeast Texas, Jason LeMaster, with the Indiana Environmental Health Response Team (INEHRT) reached out to the Texas Environmental Health Association to offer assistance in the recovery efforts. Jason wanted to let officials in Texas know that IEHA has the capability to respond with “a nearly self-sustaining, eight to twelve person Type 1 environmental health response team for environmental management to boots on the ground mission based environmental health activities.”

Recognized by ISDH

Jason pointed out that the Indiana State Department of Health recognized the IEHA team efforts as a public health asset with a $250,000 investment in equipment and resources.

“The team has developed several mission based environmental health resources packages that are critical functions during the response and recovery phase,” Jason added. He also pointed out that INEHRT has interoperable components with other health departments and state agencies that can significantly increase capabilities.

Jason said he got a response thanking him and that his information would be sent up to the state governing body.

27,000,000,000,000 - the estimated number of gallons of rain water dumped on Texas and Louisiana during Hurricane Harvey.
Diners can judge food safety

If you’re not a food inspector, or maybe just a restaurant customer, is there a way to evaluate the level of food safety when about to dine out? Jim Chan, a retired public health inspector for Toronto Public Health, spent 36 years as an inspector trying to assure customers didn’t get sick, and was interviewed by the Canadian Broadcasting Company. He outlined for the CBC five areas to observe.

The entrance

Chan says first impressions count. Are there odors? The smell of garbage or grease can be a negative sign. The smell of cooking is fine, but the odor of stale grease can mean a lack of cleaning and sanitizing. Notice if the reusable menus are clean. “Sticky” menus may indicate a lack of attention to detail in other areas.

The Bar

Waiting in the bar for a table? Chan reminds us that bartenders are food handlers. Does he or she wash hands prior to handling food items? Use utensils (gloves)? Wash the lemons before slicing? Is the milk left out? And is the ice used for beverages also used to store other items? These all offer the potential for cross contamination.

The bathrooms

Chan offers that you can’t look in the kitchen but the bathroom may yield important clues about the cleanliness of the areas you don’t see. There should be hot water, soap, and a way to dry hands. He adds that if the restaurant is doing this right, there’s a good possibility that the handwashing station in the kitchen is properly equipped. Again, any odor issues here may tell of drainage issues in the kitchen, too.

The open kitchen

If you’re in a modern facility with an exposed view of the kitchen, you can note things like the general cleanliness. Do you notice refrigerated foods left sitting out, like milk, meat, and eggs? If you can see the hand sink, do employees wash hands? And they’re NOT drying on an apron?

The cutlery

The dishwasher (human or mechanical) plays an important food safety role. Utensils, plates, glasses are to be cleaned and sanitized. Chan notes that grease smudges, lipstick marks, or dried on food can indicate a breakdown in a key cleaning process. If you can see this, imagine what might be there you don’t see! The better eating places pay attention to details.

Chapter Awards given

Two IEHA chapters presented awards at the Annual Fall Educational Conference. Central Chapter presented the Mark Fry Award to Donna Kueber and Wabash Valley Chapter chose Dan Musselman to receive its Karl K. Jones Award.

Lifetime memberships

John Bonsett, Mike Meyer, and Ken Scott were awarded IEHA Lifetime Memberships Awards.
Conference photo winners
The General Environmental Health Services Committee’s Second Annual Image Library Photo Contest, held in conjunction with the IEHA Annual Fall Educational Conference, was a success says Ellie Hansotte, chair of the committee. Ellie says there were 39 photos entered in the contest under one of four categories that corresponded to the IEHA standing committees. Conference attendees were asked to vote on their favorites.

Ellie reminds IEHA members that these and other photos in the committee’s image library are free to use by members and can be accessed by logging in to the IEHA website and selecting the GEHSC tab under “committees.” Photos may be submitted any time for inclusion in the library. Just use the photo submission form found on the committee page.
IEHA’s Sustaining Members

Support sustaining members

Sustaining members are an integral part of the association. Show them your gratitude by visiting their websites and supporting their businesses.

A&R Wastewater Management - www.arwwm.com
Crisis Cleaning – www.crisiscleaning.com
DonLevy Laboratories
ECC Horizon
Indiana Restaurant & Lodging Association – www.inrla.org
Infiltrator WaterTechnologies – www.Infiltratorwater.com
La Porte County Convention & Visitor Bureau – www.michigancitylaporte.com
Meijer – www.meijer.com
NIPSCO – www.nisource.com
Steri-Clean
Watermark Engineered Product Sales
WDD Software – www.wddsoftware.com
Pollution leads to more deaths

Pollution is the largest environmental cause of disease and premature deaths around the world says a new study published in *The Lancet*. They report that disease from pollution led to around 9 million premature deaths in 2015. They say this is three times more than deaths caused by AIDS, TB, and malaria combined.

Pollution related deaths are also 15 times higher than deaths caused by all wars or other types of violence. The number of deaths can be as high as one out of four in the most polluted countries.

Forms of pollution cited may be air, water, soil, chemical, or an occupational pollution, according to the report. Air pollution is the leading single environmental cause worldwide and is linked to 1.8 million deaths in 2015.

Residents of low to middle income countries are more likely to suffer, or from those nations rapidly increasing their industrial capacity, and children face the highest risks.

Spiders spin stronger webs

Spiders are already known to spin webs with silk, one of the strongest known natural materials. Graphene, a single atomic layer of sp2 hybridized carbon, has been described as a “super material” with uses ranging from electronics to paint. Graphene is extremely strong.

So what happens if spiders are fed graphene? The *Sydney Morning Herald* has reported that scientists from Italy’s University of Trento decided to find out. They fed spiders from the Pholcidae family water with carbon and nanotubes. They discovered that some of the resulting webs were about five times stronger and tougher than what the spiders produced naturally.

How do they do it?

Scientists are not clear as to exactly what happened to produce stronger silks, but one hypothesis was that the graphene and nanotubes coated the outside of the web strands. Another idea was that the graphene leached into the spider and then became part of the silk.

*Gizmodo* reports that this is not without risk to the spiders. Some died prematurely before spinning any webs. The intriguing idea of enabling spiders to create strong materials, while promising, is going to need additional research. But it’s possible that spiders may one day help in the production of ropes or parachute cords. The strength of what a spider can generate has been compared to man-made products like Kevlar.
IEHA Officers

President: Patty Nocek
President Elect: Jason Ravenscroft
Vice President: JoAnn Xiong-Mercado
Past President: Mike Sutton
Secretary: Kelli Whiting
Treasurer: Gretchen Quirk
Auditors: Tara Renner, Jennifer Warner
Executive Board Secretary: Tami Barrett
Journal Editor / Publisher: Ed Norris
IEHA Dietary Consultant: C. Bigby Heinz

IEHA is an Indiana not for profit organization in existence since 1951.

The Mission of the Indiana Environmental Health Association is to promote, preserve and protect environmental public health in the state of Indiana, and to encourage a spirit of cooperation among all environmental health stakeholders while serving its members in the regulatory, industry, and academic communities.

More about IEHA

The Indiana Environmental Health Association (IEHA) was founded in 1951 as the Indiana Association of Sanitarians (IAS). There were 16 charter members. The name was officially changed to the Indiana Environmental Health Association in 1985.

IEHA is affiliated with the National Environmental Health Association (NEHA), and the International Association for Food Protection (IAFP).

IEHA is comprised of eight regional chapters. They are Central, East Central, Northeast, Northwest, South-eastern, Southern, Wabash Valley, and West Central.

There are four standing committees, which include Food Protection, General Environmental Health Services, Terrorism And All Hazards Preparedness, and Wastewater.

The operations of IEHA are governed by an Executive Board that meets regularly. The Board and various standing committees are made up of voting and non-voting members. Information plus meeting dates, times and locations for the chapters and standing committees may be found on the IEHA website listed on this page.

All meetings are open to any member or guest but voting privileges and active participation are limited to voting members only.