2019 FALL EDUCATIONAL CONFERENCE

With the theme “Sharpening The Edges: The Power Of One”, the 69th Annual Fall Educational Conference drew 196 registered attendees for the three day event in South Bend’s Century Center. Conference Chair Jammie Bane (pictured at right) welcomed the group by quoting the example of the “butterfly effect”, a situation in which something as small as a butterfly’s wings can have a far-reaching effect. A single person in environmental health can have a similar effect, he said. The conference was September 23 to 25.

SPEAKERS HIGHLIGHT MAIN SESSIONS

Seven speakers highlighted the event, with many more addressing specialized issues during the three concurrent afternoon breakout sessions.

Mindy Waldron, Administrator, Ft. Wayne - Allen Co. Dept. of Health, gave the keynote address, describing how public health has evolved over the years with “Public Health: Then & Now”. Mindy pointed out that 100 years ago, false links were believed to cause diseases, like lack of fresh air. Later, causes were more accurately

(Continued on page 4)
FROM THE ED DESK

Here’s the latest Journal for your perusal. The two formats are still available - PDF and Flip Page posted on the IEHA website. Only the latest Flip Page issue will be available due to the cost of storing back issues. So old links won’t work but the PDF versions remain.

As always, comments and contributions are welcome and you can still find contact info on the back page.

Ed

FROM THE PRESIDENT

As I look outside my office window, a sea of yellow and red leaves heralding the end of another year, I pause to reflect a bit on my tenure as President of IEHA. Jammie’s excellent Fall Conference is over. A blur of board meetings, chapter meetings and occasional flurries of frantic emails all lay behind me now. My time in this position reaches its end and, while it’s been a wild ride, I’m ready to move on to new things.

From my first chapter meeting, serving as IEHA President was always something I imagined doing. And while it certainly challenged me at times, I am very happy that I did it. I do not need to tell most of you about the benefits of belonging to a professional organization like IEHA—you’ve probably already felt them. But to most of you, involved only at a level where you feel most comfortable, I would like to tell you why I think that is a mistake.

The best benefit IEHA can offer you is not networking, expanding your knowledge base or bonding with and learning to see your co-workers in a new way—though you can get plenty of all those things. The best benefit is self-improvement. I’m not talking about just learning new things; I’m talking about learning new things about yourself.

The first step is to leave your comfort zone; choose to be involved in a way that makes you just a little bit uncomfortable. Because when you do that, you will watch as you rise to that challenge and become a little bit better in the process. Whether that’s taking on a bigger role in your local chapter, the state board, or one of the committees is up to you. You may surprise yourself when you see just how capable you are and discover how fulfilling it can be to push yourself. IEHA can bring you confidence and self-actualization on top of all the other benefits you already know about.

A gust of chill fall air blows through and another leaf carves an elegant, arcing path to the ground in its wake. Each leaf that falls becoming another grain of sand in the hourglass march to winter. It’s hard to believe that 2019, and with it my tenure as President, is almost over. I stepped outside of my comfort zone several times on my path to becoming your President and I regret none of it. I can only encourage you to do the same. Thank you so much for giving me this opportunity to discover myself. I loved every minute of it.

JoAnn
REFILLABLE TECHNOLOGY COULD MEAN 3000 MILE ELECTRIC CAR RANGE

Purdue University researchers are testing a new type of electric power vehicle that could be a big step toward increasing their range. The “refillable” technology uses a new type of “flow” battery that has already been successfully tested in golf carts, and has shown it could provide enough power for a car to travel 3,000 miles.

“It’s a game-changer for the next generation of electric cars,” says John Cushman, distinguished professor of Earth, Atmospheric and Planetary Sciences, “because it doesn’t require a costly re-build of the electric grid.”

The battery does two things: produce electricity and also hydrogen, which can be stored in low pressure tanks on board. The tested technology replaces the fluid in the batteries at about 300 miles with a process similar to refilling at a gas station. Then every 3,000 miles, the battery’s anode material is replaced, in less time, and at about the same cost, as an oil change. There is a membrane or separator, and the single fluid technology oxidizes the anode to produce electrons. And through a reduction at the cathode, generates electrical current to power the vehicle. (Anode and cathode are two battery parts through which electrons flow.)

“We are at the point where we can generate a lot of power, more than you would guess could come from a battery like this,” says Dr. Cushman.

(from Purdue Research Foundation News)
CONTROLLING COCKROACHES

Researchers at Purdue, after finding that cockroaches are increasingly resistant to even the best insecticides, agree that a form of integrated pest management is the best, and perhaps the critical approach to control.

Control must begin with improved sanitation including keeping food debris, grease, and other attractants cleaned up. This must be done before leaving a facility for the night.

Purdue advises that additionally, traps and vacuums might be used to remove cockroaches. To only treat and not clean means you’re probably just throwing money away.

COCKROACHES BECOMING INVINCIBLE

Researchers at Purdue have made a serious discovery about cockroaches - they are developing cross-resistance to pest control operators’ best insecticides. It is known that roaches carry many types of bacteria that lead to illness, and the saliva, feces, and body parts they leave behind don’t just trigger allergies, but can cause the condition in children.

A study at Purdue’s Department of Entomology professor Michael Scharf, and chair O. W. Rollins/Orkin found evidence that German cockroaches are becoming more difficult to eliminate.

“Cockroaches developing resistance to multiple classes of insecticides at once will make controlling these pests almost impossible with chemicals alone,” Professor Scharf said.

During tests on cockroaches rotating three insecticides, researches kept populations from growing but weren’t able to eliminate them. Using a single insecticide, at first cockroach numbers were reduced, but in some tests, despite initial control, populations actually grew. Once exposed to one insecticide, the insects developed resistance to other chemicals they had not been exposed to before, a cross-resistance. And female cockroaches that survived would produce offspring essentially already resistant to that insecticide.

SPEAKERS HIGHLIGHT (CONTINUED)

(Continued from page 1)

attributed to rodents, hygiene. She said in early years, there was a lack of regulations, and neither birth nor death records were tracked.

The first controls were established to handle the accumulations of sewage and trash, and sick persons were routinely quarantined with signs posted stating the alleged illness.

Mindy said the first Boards of Health date from the 1800s and predate local health departments. She pointed out the work to advance public health by Dr. John Hurty, the first Secretary of the State Board of Health. His work led to some new laws that are still on the books.
DEALING WITH HOARDERS

Health Department environmentalists may encounter residential situations where occupants have collected numerous items they probably don’t need. Lots and lots of items. Dr. Heather Plinovich, Director and Clinical Psychologist with the Anxiety & OCD Behavioral Health Center (at right), told conference attendees that how inspectors deal with such people can make all the difference in changing behavior. The root causes could be mental or physical, she said.

“Those who hoard don’t see it as a problem,” she said, “and it’s not because they are lazy. They see value in what they collect.”

She emphasized the point that it is important to separate the behavior from the person. They are not “hoarders” but people who “hoard.” She added that they have “possessions” or “collections” but it’s not trash or junk to them.

One way to approach the issue is to address the safety issues first, then suggest making improvements to a small area of the home, like a corner of one room first. Then follow up regularly to assess progress.

HUMAN TRAFFICKING AWARENESS

Jay Dotson (at right), owner of Fortress Preparedness Services and a 25-year veteran of the Muncie Police Dept, shared the growing concerns with human trafficking in Indiana. He first told conference attendees that there is a difference between “smuggling” and “trafficking.” Those who are smuggled volunteer, while persons being trafficked are being forced. They are like property to their handlers and often forced into labor or sex trafficking.

Jay said that often victims are taken under false premise with the promise of a job, then charged “fees” in excess of what they might earn. Kids can be enticed with the promise of a free cell-phone, or cash. There are laws to protect victims and Jay adds that inspectors should report any suspected victims to law enforcement.

“The police and FBI will investigate,” he said.
PREVENTING TURBINE BIRD STRIKES

Raptors and bats colliding with giant wind turbines claims the lives of many each year. But National Wildlife magazine is reporting that a cutting edge project in Wyoming’s Top Of The World Windpower Project might help save these and other birds. It’s called “IdenfiFlight” and consists of a network of 47 cameras mounted on top of 30 foot towers inside the 17,000 acre wind farm’s 110 turbines. A robotic eye watches for large birds, and if detected, a high-resolution camera zooms in, transmits an image to a computer that decides if the bird is an “eagle” or “non-eagle”

If “eagle”, the camera determines the bird’s path and if it’s heading for a wind turbine. If so, the system can slow the turbine’s blades quickly, preventing a deadly collision. This can be done in a matter of seconds. The technology shows promise as alternative fuel like wind power continue to grow.

“If a camera detects a raptor on a path toward a wind turbine, the blade speed can be slowed in seconds, avoiding a deadly collision.”

DO YOU KNOW?
How many varieties of apples are grown in the United States?
A. 25
B. 250
C. 2,500
D. 25,000
Find the answer on page 11.

AFEC AWARD WINNERS RECOGNIZED

One of the highlights of the IEHA Annual Fall Educational Conference is the announcement of award winners at the traditional awards banquet. Winners this year included Lifetime Membership awards going to Donna Oeding and Linda Mauler.

Matthew Herrick (left in photograph) received the Rookie of the Year recognition from Lisa Chandler.

Sylvia Garrison, at left, was presented the Sanitarian Emeritus Award. The Chris Ulsas Volunteer of the Year Award, selected by the Conference Chairperson, went to Patty Nocek.
MAJOR AWARD WINNERS ANNOUNCED

Some of the award winners at the Annual Fall Educational Conference included Lisa Chandler (right) receiving the Tim Sullivan Memorial Award from Sarah Dallas.

Below, Lee Green (on the left) was recognized as the Environmental Health Specialist of the Year, accepting the award from Jason Ravenscroft.

THREE BILLION BIRDS ARE GONE

Bird populations have declined noticeably since 1970. Experts blame habitat loss, pesticide use, and other factors that make the spring season more silent than ever.

The journal Science says it analyzed long-term bird population surveys and found that in grasslands, birds like sparrows, finches, and warblers have been hardest hit, with a 53 percent decline in 48 years.

Peter Marra, Director of the Georgetown Environment Initiative calls this, “staggering, devastating news.” He adds birds are crucial to a healthy functioning of ecosystems. Birds help keep insects in check, dispose of rotting carcasses, and pollinate plants.

Causes of the bird decline include use of pesticides, and to a lesser extent collisions with windows, and cats.

The silent auction held Monday during the conference raised about $1,657. It had been decided that the money would be divided among the four standing sub committees.
MILLIONS LACK TOILETS, RUNNING WATER

Studies reveal that upwards of 1.7 million Americans don’t have a tub, shower, or any running water. And, as Earth Justice reports, as climate change accelerates, sanitation issues will become more widespread.

Increasing rainy seasons means rising risks that flood waters will spread raw sewage from faulty septic systems. An example is Lowndes Co, Alabama, where many “improvised” on-site systems carry sewage through PVC pipes to nearby pits. It sits there until a heavy rain washes the sewage back into yards or back up drains. Alabama is not alone. Residents in many poor areas lack the resources necessary to repair failed or lacking systems despite states’ requiring proper sanitation.

Evidence shows that diseases spread when sanitation is lacking.

PFAS AN EMERGING THREAT

PFAS or Per- and polyfluoroalkyl substances include about 5,000 manmade chemicals and are an “emerging contaminant that is here to stay,” according to Dr. Graham Peaslee when he spoke to attendees at the Annual Fall Educational Conference. He said that PFAS chemicals were developed because they repel water, making them useful on all sorts of products from rain gear and cookware to firefighting foam.

But the problem, he says, is that they “last forever” and have been found to contaminate drinking water sources. Researchers are now learning that PFAS chemicals can get into the human bloodstream after exposure, which can lead to cancer, thyroid or kidney issues, and low infant birth weights. It’s become a global issue he said and can be considered the largest pollution event ever. Products containing PFAS can breakdown in landfills, but the chemical remains.

Because testing for the presence of PFAS didn’t begin until recently, it’s dangers weren’t known and there are no specific regulations for exposure but other laws could be applied. The US Environmental Protection Agency has set a guideline for exposure of 70 parts per trillion, but that’s not a regulation. Dr. Peaslee says public pressure will lead to change, and a number of environmental groups are pressuring the EPA and congress to act.

WV CHAPTER AWARD WINNER

Sharon Pattee, left, accepted the Karl K. Jones award, presented by Wabash Valley Chapter President Rhonda Madden during the awards banquet at the IEHA Annual Fall Educational Conference held in South Bend.
NEXT YEAR’S IEHA OFFICERS CHOSEN

Officers for 2020 have been selected for the Indiana Environmental Health Association. They are:

President: Jammie Bane
Vice President: Jennifer Heller
President Elect: Holley Rose
Secretary: Lisa Chandler
Treasurer: Gretchen Quirk
Auditors: Mathew Herrick, Catherine Hess

“A snapshot inspection cannot control risks, and is dependent upon the inspectors’ training and experience, which varies widely.”

ARE RESTAURANT GRADES A GOOD IDEA?

That is an easy question to answer for Mark Miklos (pictured at right) of the National Restaurant Association. He said because of all the negative aspects connected to such a plan, the answer is “no”.

He first pointed out that a “grade” based upon a single inspection is not representative of how the business is operating. This does nothing, he said, as a “snapshot” cannot “control risks”. He said inspections are too inconsistent, not just between inspectors in a particular jurisdiction, but from state to state. Training and experience vary widely among inspectors. “Scores and grades,” he said, “can cause a restaurant to be unfairly criticized, or the public can get a false sense of security.” He questioned whether a “grade” might become an administrative procedure, bypassing due process.

An example Mark used demonstrated the unwarranted negative impact of a score. “The difference between an “89” and a “90” is insignificant but to an uninformed customer, it’s the difference of “safe” and “unsafe”, he said. This can have an enormous economic impact over time. Grading programs can also be expensive to implement, he concluded.
NOISE POLLUTION A THREAT TO HEALTH

We are aware of the continuous threats to our air and water and even ourselves from contami-
nates and pollutants. But a recent report from the World Health Organization (WHO) points
out that threats from noise can also adversely affect one’s health.

WHO says as the population grows, exposure to noise increases may require action from legis-
lation or at least noise management. Noise pollution can have direct and cumulative adverse
effects not just to health but economic as well. WHO defines seven catego-
ries of adverse health effects on humans caused by noise.

The first is impaired hearing. Human hearing can be permanently dam-
aged with an ongoing exposure to noise levels above 80 dB. WHO com-
pares this level to listening to heavy truck traffic.

The second is interference with spoken communication. If one can’t carry on a normal con-
servation with another person three feet away, the surrounding noise is too loud. This can lead to

“WHO says as population grows, exposure to noise pollution increases
and might need legislative action or at least noise management.”

KIDS AFFECTED

Our environment con-
tains multiple sources
of noise pollution, from
traffic to trains to con-
struction sites. Adverse
affects come from total
exposure over the long
term. Children and in-
fants can be signifi-
cantly affected, and the
elderly.

Legislative action or
some form of noise
management guidance
may be needed to re-
duce noise exposure.
WHO says noise is a
significant public
health problem.

difficulty concentrating, fatigue, misunderstandings, and stress.

Third on the WHO list is sleep disturbances. WHO says uninter-
rupted sleep is necessary for proper physiological and mental
functioning for a healthy person. Noise disrupts sleep and might
lead to higher blood pressure, increased heart rate and even ar-
rhythmias.

The fourth area WHO lists is cardiovascular disturbances. They
say increasing evidence indicates that noise pollution might be a
risk factor for cardiovascular disease and related higher blood
pressure and heart rate. If the exposure is high enough, stress
levels can increase.

Next listed disturbances in mental health. Although not thought
to be a cause of mental illness, it might contribute to mental
health issues like anxiety, stress, nervousness, changes in mood,
and maybe psychosis. School children can be the most affected.

Number six is impaired task performance. Noise can impair job
performance, increase errors, and decrease motivation. Reading
attention, problem solving, and memory are most affected.

Last is negative social behavior and annoyance reactions. Annoy-
ance is defined as feeling displeasure. This can mean anger, dis-
appointment, helplessness, depression or exhaustion. Changes in
social behavior usually follow that can be aggressive.
FIXING DATE LABEL CONFUSION

The U. S. Government Accountability Office (GAO) has studied the myriad of date labeling on food products in the United States and in a recent report noted that the U. S. Department of Agriculture and U. S. Food and Drug Administration have taken steps to reduce the confusion about the meaning of phrases on labels. But more should be done. It is left to manufacturers to decide how to date-label their products, but the current system leads consumers (and food establishments) to throw out food that is still safe. The GAO report shows that about one-third of the food produced worldwide gets lost or wasted - about 1.3 billion tons yearly. It determined that some food waste occurs in the U. S. because of consumer confusion about the labels they find on food products.

So the GAO is recommending that the USDA and FDA “develop a mechanism to facilitate coordination with relevant nonfederal stakeholders on actions related to date labels.” In other words, make the system simpler.

Most date marks on foods have little or nothing to do with food safety. For example, “Sell By” dates are generally for inventory control, meaning manufacturers want store owners to replace the product with newer items. “Best By” will nearly always refer to quality. In the manufacturers’ view, after that date, the food may no longer have the quality (taste, color, texture, consistency, appearance, etc.) that is desired. But it’s not unsafe. And past-date foods are not a food code violation except for infant formula.

SOME OF THE INDUSTRY TERMS FOR FOOD DATES

The U. S. Government Accountability Office lists some of the common terms food producers use on food labels that cause consumer confusion;

Sell by,
Use by,
Best by,
Better if used by,
Display until,
Best when used by,
Fresh until,
Enjoy by,
Best before,
Use or freeze by,
Best if used by,
Expires on,
Better if used before

The GAO wants the system simplified, but it’s up to industry to agree.

Answer to the trivia question on page 6 is “c” 2,500.
(U.S. Apple Association)
IEHA OFFICERS

President: JoAnn Xiong-Mercado
President Elect: Jammie Bane
Vice President: Holley Rose
Past President: Jason Ravenscroft
Secretary: Lisa Chandler
Treasurer: Gretchen Quirk
Auditors: Tara Renner, Jennifer Warner
Executive Board Secretary: Tami Barrett
Journal Editor / Publisher: Ed Norris
IEHA Political Consultant: Phil A. Buster

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

“The Mission of the Indiana Environmental Health Association, Inc. 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, Inc. (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, Southeastern, 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 only “voting members” may vote or hold an office.