

# THE HOOSIER KERNEL

Publication of the

## INDIANA NUT & FRUIT GROWERS ASSOCIATION *INDIANA NUT GROWERS ASSOCIATION*

—————Pam Childers, Editor—————  
—————Jim McKenna , co-Editor—————

**Volume 65, No. 4**

**December 2018**

### Winter Meeting

**Sunday, December 2, 2018**

**Scholarship Hall — Fitness Farm Indianapolis  
2525 West 44th Street  
Indianapolis, IN 46228**

**Lunch 12:30    Business Mtg./Elections 1:30    Speaker 2:30    Auction 3:00**

*Bring Your Table Service and a Dish for the Pitch-In Lunch - Chairs & Tables Provided.*

*The Board of Directors and Officers will meet 4:00—5:00 pm*

*Be prepared to VOTE for Officers & Board Members*

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INFGA's mission is to promote growing nut and fruit trees in Indiana for individuals, families, and various small-scale producers through educational meetings and field days that focus on nut and fruit tree culture and we promote the development of good nut and fruit cultivars for Indiana. For more information visit us at [www.nutgrowers.org](http://www.nutgrowers.org)

# WINTER MEETING DIRECTIONS

## Scholarship Hall

2525 West 44<sup>th</sup> Street Indianapolis, IN 46228

### Directions from the North:

- Take US-31 S
- Merge onto Old Meridian Street
- At the Circle take the 4<sup>th</sup> exit staying on Old Meridian Street
- Remain on Old Meridian Street through each Roundabout
- Turn Left onto N. Meridian Street
- Turn Right onto Kessler Blvd. W. Drive
- Slight Left to stay on Kessler Blvd. W. Drive

### From the East:

- Take I-70 W towards Indianapolis
- Take Interstate 65 N toward Chicago
- Take exit 119 to merge onto W. 38<sup>th</sup> Street
- Merge onto W. 38<sup>th</sup> Street
- Take the Kessler Blvd ramp

### Directions from the South:

- Take I-65 N
- Take the 38<sup>th</sup> Street Exit #119
- Merge onto W. 38<sup>th</sup> Street
- Take the Kessler Blvd. ramp
- Turn Left onto Kessler Blvd N. Drive

### From the West:

- Take I-465 N to W 38<sup>th</sup> Street
- Take Exit 17 turning right onto W. 38<sup>th</sup> Street
- Turn Left onto Kessler Blvd N. Drive



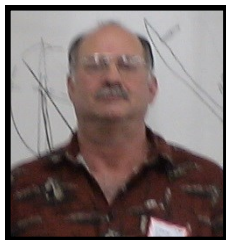
**Mr. Ben Cowan, Farm Manager for the Indy Fitness Farm - will be our Speaker**

**December 2, 2018 - 2:30 - 3:00 pm**

Ben Cowan has a wealth of experience in plant and animal agriculture and he has been working to improve the production and quality of hickory and hican crops at the Fitness Farm for nearly two years now. The Fitness Farm is dedicated to promoting and enhancing children's and adult's health and wellness. They do this by providing a self-sufficient, multi-faceted community resource that offers: event space; education and exercise programs on nutrition, fitness, and agriculture; a fully sustainable market garden for farm-to-table sales; and a seasonal on-site produce stand. Ben's talk and PowerPoint presentation will cover the opportunities and challenges of managing the Spurgeon Carya collection. Ben has developed some unique and clever approaches to weevil management and harvesting systems that INFGA members will appreciate. Finally, he will also discuss new approaches that may offer promise for small scale nutgrowers trying to commercialize their crop.

## On the Stump

By President Jerry Batta



### Greetings fellow nut and fruit growers!

Those of you were fortunate enough to attend the fall meeting at Mic Perry's farm were treated to his tree plantings, prairie habitat and amazing display of traps. One trap that I thought was of special interest is the squirrel trap setup. By containing the trap in a wooden box it would limit the catch to only squirrels. Thanks Mic for allowing us to see what you have done.

At the meeting Kris Heeter volunteered to take on the task of being our new webmaster. She is very enthusiastic about providing us a quality web page. Please submit your comments and suggestions to Kris. Kris and her husband are also in the process of being the first members to take advantage of our new repository program. If you would like to have INFGA finance your new nut and fruit orchard contact the committee chairman, Jerry Lehman.

Please bring in your nut samples for the nut evaluation. Bill Koehne will be doing the nut evaluation again this year. If you would like to be part of this contact Bill.

Clear your schedules. Next year the Flower and Patio show is scheduled for March 9 -17. The tree wrap party then should happen about March 2nd or 3rd and the Scion Swap meeting should fall on March 24.

Another incredibly fast year has gone by once more. You can be sure to believe that each passing year goes by faster than the last. We have had some great meetings and meeting places last year and I am looking forward to what we can come up with next year. It helps everyone in the organization when we each contribute to the greater good. Please be prepared to discuss and provide suggested dates for next years meeting dates. We will have a board meeting after the business meeting to prepare for next year. If you know of anywhere that we could meet that has the proper setting and facilities, suggestions would be appreciated. The association also needs some new volunteers to fill vacancies in many of the positions. The Flower and Patio Chairman position is also up for grabs. Anyone who might be considering this can contact the Membership Chair, Jerry Lehman or myself. Contact information is located in the back on the officers page.

The Dec. 2nd business meeting will be once again graciously hosted by Joan Servaas at the Scholarship Hall. Please be sure to thank her for holding this for us.

See you at the Meeting.

### Membership Report

We have a total of 283 members comprised of 209 lifetime members plus 9 complementary memberships to editors of other organizations. The comp members receive their Hoosier Kernels electronically so there is no cost to the treasury. Forty four (44) memberships will expire December 31, 2018.

There are 18 new members, 2 of which purchased lifetime memberships.

Five new lifetime members are:

Bruce and Rebecca Rougraff, Indianapolis IN  
Jonathan Bachmeyer, Columbus IN  
Carl and Barbara Harcourt, Milroy IN  
Brian Herbert, Bloomington IN  
Richard Owens, Williams IN

Eighteen new members are:

Brian Herbert, Bloomington Indiana  
Richard Owens, Williams IN  
Cheryl and Paul Grim, Fort Wayne IN  
David Schlabach, Madina NY

Brandon Kiefer, Bloomington IN  
Joe and Katie DeBrot, Zionsville IN  
Scott and Jenny Erkfitz, Noblesville IN  
Kenneth Delbridge, Newcastle, IN  
Kim LaSalle & John Hiatt, Fishers IN  
Sandra Malcolm, Carmel IN  
Dale and Darlene Olson, Clayton IN  
Dustin Fitzgerald, Indianapolis IN  
Phil and Annette Cox, Montezuma IN  
Freedom Eastling, Indianapolis IN  
Loretta and Walter Shelhamer, Westville IN  
Anthony Daddini, West Harrison IN  
Dr. Douglas Armstrong, Bourbonnais IL  
Julia and Michael Valliant, Bloomington IN

Lifetime membership fund is \$31,242.05, after paying the 2018 dues. Each lifetime membership presently is valued at \$149.48 each.

Gen. Treasury account November 30, 2018 is valued at \$76,011.29 (not including the checking account). The research fund has \$10,639.75.

Respectfully submitted Jerry Lehman

## MINUTES OF THE SEPTEMBER 2018 INFGA MEETING

**Submitted by: Kris Heeter**

### Minutes:

There were no corrections to last meeting's minutes. Pete Jones made a motion to accept the minutes, several members seconded. Minutes were approved unanimously.

### Insight to this meeting's location:

Mick Perry (host) told us a bit about his place. After the official meeting and auction, the tour will include a view of some invasive plants and how they are being addressed. Mick has a shuttle wagon that will take members ½ mile down the road to visit a young orchard planted in the last couple of years.

New Visitors: Anthony Gaddini and his young daughter Maria came from Franklin County (SE part of Indiana, near Cincinnati).

Treasurers Report: We currently have \$3226.79 in the ONB Business Checking account

### **Old Business**

Repository Report/Update from Jerry Lehman: Jerry Lehman, Mick Perry and Pete Kuhns visited the 100 acres in Solsberry IN (Greene County) owned by Kris and Brian Heeter as a possible repository site. The property has an old growth forest that includes tulip poplar and many nut trees. An open field, next the road, is the proposed repository site (1 to 1.5 acres). Jerry, Mick and Pete agree that it is a good location. Members will vote at the next business meeting after hearing the final proposal. Kris Heeter was present and made a correction to the repository report in the last Kernel. The trees mentioned in the last Kernel are trees that are already on the Heeter property, NOT the trees proposed for the repository. See Tree Proposal on page 18.

### **New Business**

Website not current: Pete Jones indicated that he could not find the information on the INFGA website about this meeting. Several express the desire to have INFGA and meeting information more readily available online.

Kris Heeter volunteered to work on the website and keep it up-to-date if she can get access. Jerry Lehman indicated

that he could put Kris in touch with the Vernon Vanderkleed who can give her access. Kris also volunteered to help in post meeting information and updates to the Facebook group page

Next Meeting: Scheduled for Sunday, December 2nd at the Indianapolis Fitness Center (same location as last year)

### Paw Paw Festival Update:

Doug Fell gave an update on the pawpaw festival in Ohio. All four awards this year were won by 2 INFGA members from Terre Haute, Mark Hildebrand won Largest and third place in Best Pawpaw and Jerry Lehman won First and Second place in Best Pawpaw. Jerry had a 23 ounce entry and Mark beat him by 3 ounces, weight was 26.4 ounces. Mark's winning variety was Lehman's Delight. All the Ohio Pawpaw Festival award plaques this year came to Terre Haute.

### Nut Stories:

Bill Deeter summarized the state of nuts this year in NE Indiana. Black Walnuts were sparse. Hybrid butternuts and acorns did well.

### DNR Update:

Phil O'Connor mentioned that the Vallonia Nursery buys seeds. Some of the long time collectors aren't collecting as much as they used to. Visit the DNR website for more information and to inquire about the nursery's needs

### 2018 Nut Evaluation:

Nut evaluations will be done again this year. Visit the INFGA website to download the form and either mail the seeds in per the instructions on the form or bring the nuts to the Dec meeting. Sample submission includes 15 nuts.

### New Member DVDs:

Jerry Lehman brought the New Member DVDs for those who need one.

**2:13 pm: Meeting Adjourned.** Doug Fell made the motion to adjourn, Mick Perry seconded.

## FALL 2018 MEETING ATTENDEES

Doug Fell, W. Terre Haute	Kay Grimm, Indianapolis	Don Stohler, Frankton
Tony & Sharon Basiewicz, Anderson	Gary Herrmann, Evansville	Kris Heeter, Bloomington
Jim Weaver, Zionsville	Jerry & Jackie Batta, Guilford	Bill Deeter, Plymouth
Phil O'Connor Bloomington	Max Gentry, Anderson	Mike Perry, Winamac
Jim & Fay Komonov, Zanesville	Anthony Vonderahe, Kokomo	Mick Perry, Winamac
Mark Hildebrand, Fairbanks	Don Leicht, Peru	Corwin Miner, Monroeville
Tom Voreis, Noblesville	Roy & Pam Childers, Peru	Preston and Ruth Gwinn, Bloomington
Jerry Lehman, Terre Haute	Ed Stath, Rensselaer	Pam Howie, Hagerstown
Tom & Nancy Werner, Lafayette	Pete Jones, Peru	Jerry Zimmerman, Indianapolis
Anthony Gaddini, Sharptown	Kenneth Marnier, Kokomo	Bill Koehne, Greensburg
Sue Spicer, Indianapolis	Sue Keen, Alexandria	Claude Diehl, West Lafayette

## Health Benefits of Pecans

Submitted by John Harrell

- ✓ Pecan nuts are a rich source of energy having 690 calories/100 g and contain health benefiting nutrients, minerals, antioxidants and vitamins that are essential for wellness.
- ✓ The nuts are rich in monounsaturated fatty acids like oleic acid and are an excellent source of phenolic antioxidants. Regular addition of pecan nuts in one's diet helps to decrease *total* as well as *LDL* or "bad cholesterol" and increases *HDL* or "good cholesterol" levels in the blood. Research studies suggest that the Mediterranean diet, which is rich in dietary fiber, monounsaturated fatty acids, and antioxidants would help to prevent coronary artery disease and strokes by favoring healthy blood lipid profile.
- ✓ Pecan nuts are a rich source of many phytochemical substances that may contribute to their overall antioxidant activity, including polyphenolic antioxidant ellagic acid, vitamin E, beta-carotene, lutein, and zeaxanthin. Research studies have been suggestive of that these compounds help the body remove toxic oxygen-free radicals and thus, protect the body from diseases, cancers, as well as infections.
- ✓ Anti-proliferative properties of *ellagic acid* are because of its ability to inhibit DNA binding of certain carcinogens such as nitrosamines and polycyclic aromatic hydrocarbons, thus, offering protection to the human body from cancers.
- ✓ Pecans are excellent sources of vitamin-E; they are especially rich in gamma-tocopherol; provide about 25 g per 100 g. Vitamin E is a powerful lipid soluble antioxidant, required

for maintaining the integrity of cell membrane of mucus membranes and skin by protecting it from harmful oxygen-free radicals.

- ✓ The nuts are very rich sources of several important B-complex groups of vitamins such as riboflavin, niacin, thiamin, pantothenic acid, vitamin B-6, and folates. Together, these vitamins work as co-factors for the enzyme metabolism inside the human body.
- ✓ The nuts are also a rich source of minerals like manganese, potassium, calcium, iron, magnesium, zinc, and selenium.

### Pecan nutrition (*Carya illinoensis*), values per 100 grams

(Source: USDA National Nutrient data base)

Principle	Nutrient Value	% RDA
Energy	691 calories	34.5%
Carbohydrates	13.86 g	11%
Protein	9.17 g	17%
Total Fat	71.9 g	360%
Cholesterol	0 mg	0%
Dietary Fiber	9.6 g	25%
<b>Vitamins</b>		
Folates	22 µg	5.5%
Niacin	1.167 mg	7%
Pantothenic acid	0.863 mg	17%
Pyridoxine	0.210 mg	16%
Riboflavin	0.130 mg	10%
Thiamin	0.660 mg	55%
Vitamin-A	56 IU	2%
Vitamin-C	1.1	2%
Vitamin-E	24.44 mg	163%
<b>Electrolytes</b>		
Sodium	0 mg	0%
Potassium	410 mg	9%
<b>Minerals</b>		
Calcium	70 mg	7%
Copper	1.2 mg	133%
Iron	2.53 mg	32%
Magnesium	121 mg	30%
Manganese	4.5 mg	196%
Phosphorus	277 mg	40%
Selenium	3.8 µg	7%
Zinc	4.53 mg	41%
<b>Phyto-nutrients</b>		
Carotene-β	29 µg	--
Crypto-xanthin-β	9 µg	--
Lutein-zeaxanthin	17 µg	--

## *Mari's Page*

Today is cloudy with misty rain. As I look out the window, I see most of the leaves have fallen. The Maples and some Oaks have shown their usual fall colors but the rest of the tree leaves just fell off. We had a fall with very green leaves until the weather finally cooled leaving not much of fall foliage this year. So now it's time for ***Paws Paws, Persimmons and Pumpkins***. And speaking of Paw Paws, my tree I purchased from the nut growers was loaded with very large paw paws that could have numbered 50 fruits.



### **Paw paws, Persimmons and Pumpkins**

#### **Cream Pie Pudding with Paw Paw Puree Added**

1 cup sugar	2 cups milk
1/3 cup flour	3 eggs
Dash of salt	1 tsp vanilla
½ to 1 cup paw paw puree	

Mix dry ingredients together. Add milk, eggs and vanilla and blend well. Add the puree and blend in. Cook on a medium heat stirring constantly until bubbly and thick. Pour into pudding glasses or a pre cooked pie shell. Eggs can be separated for making a meringue from the whites to cover a pie.

#### **Persimmon Cookies**

1 ½ cups sugar	½ tsp. nutmeg
½ cup butter	½ tsp. cinnamon
cup persimmon pulp	¼ tsp. cloves
cups flour	1 cup raisins
1 tsp. baking soda	1 cup walnuts or pecans
1 tsp salt	1 egg & powdered sugar

Cream together sugar and butter, add persimmon pulp and egg. Blend well. Set aside. Sift together the dry ingredients and combine with the persimmon mixture and blend well. Add raisins and nuts and blend well. Drop by spoonful on cookie sheet and bake at 375° for 15 minutes. Dust in powdered sugar.

#### **Velvety Pumpkin Soup**

(Continued on page 7)



2 tbsp. butter	1/8 tsp. white pepper
1 tbsp. minced green onion	1/8 tsp. cinnamon
2 cups pumpkin	2 chicken flavored bouillon cubes
1 cup water	2 cups half and half
1 tbsp. brown sugar	1 lemon sliced thinly for garnish
½ tsp. salt	minced parsley for garnish

In two quart sauce pan over medium heat, sauté green onion in butter until translucent. Stir in pumpkin, water, brown sugar, salt, pepper, cinnamon and bouillon until blended and mixture begins to simmer. Cook five minutes to blend flavors. Stir in half and half and heat through. Ladle into bowls and garnish with a thin slice of lemon and parsley. Serve with crusty bread.

### **Pumpkin Butternut Squash Pie**

3/4 cup cooked pumpkin	1 tsp. cinnamon
¾ cup cooked squash	¼ tsp. allspice
1 cup milk	¼ tsp. cloves
2 eggs	¼ tsp. ginger
½ cup brown sugar	½ tsp. nutmeg
½ cup white sugar	1 tbsp. flour & one unbaked pie shell

Mix together the first four ingredients. In a separate bowl, mix the remaining dry ingredients. Add to the pumpkin mixture and use an electric mixer to blend together. Pour into unbaked pie shell. Bake at 450° for ten minutes and lower to 350° for 50 minutes. Bake any extra in custard cups.

### **Ginger Pumpkin Praline Squares**

1 cup packed brown sugar	4 eggs
¼ cup sugar	1 tsp. cinnamon
1 29oz. can pumpkin	½ tsp. ground ginger
1 12oz. can evaporated milk	¼ tsp. ground cloves

Topping: ¾ cup flour, ½ cup packed brown sugar, ¼ cup butter and ½ cup chopped pecans.

In large bowl combine all filling ingredients. Beat smooth for 1 to 2 minutes. Pour into greased 13 by 9 inch baking pan. Bake at 350° for 25-30 minutes. In a small bowl combine flour and brown sugar; cut in butter until crumbly. Add pecans.

Sprinkle topping over filling and continue baking for 15 to 20 minutes testing with a knife for doneness. Serve with whipped cream.

*Happy autumn to You*

## The Farm at Prophetstown: Proposal for a Demonstration Orchard

By, William L. Hoover, PhD

with Richard Hayden, PhD; Jules Janick, PhD; and James McKenna, MS

The Farm at Prophetstown is a separately administered component of Prophetstown State Park, Indiana Department of Natural resources, outside of Battleground, IN. It must however operate in a manner consistent with the objectives of the IN State Parks and the established mission of The Farm. The Farm consists of the structures and operations associated with a general family farm in the 1920's period in Indiana. Family farms in this era almost always included an orchard producing primarily apples. In addition to providing edible fresh fruit, apples were used to produce products vital to the family's economy year round. These included cider, hard cider, vinegar, apple butter and dried apple slices among others. The Farm at Prophetstown does not currently include an orchard.

The primary purpose of the proposed orchard is to present to visitors a typical family farm orchard, circa 1920's. The proposed orchard will do so, but in addition provide the opportunity to demonstrate apple production more broadly, and the vital role of orchards to farm families. These include the fruit produced by trees grown from seed, referred to as "Johnny Appleseed trees." As a result visitor will become aware of the importance of grafting to produce fruit of a specific type. A state-of-the-art cultivar is proposed for inclusion to demonstrate the benefits of breeding programs to produce fruit resistant to many harmful insect and disease pests, and meet the expectations of modern consumers. All but these two selections will be cultivars typically found on farm orchards throughout Indiana. The selection of cultivars is complicated by the fact that the 1920's was the start of the selection of modern cultivars for commercial orchards. We assume, however, that farmstead orchards continued to be dominated by older cultivars with much less

importance given to the appearance of apples to be sold in retail markets.

Farm operations include the production of pork and beef cuts sold on site at retail prices to help offset operating costs. The livestock selections used are modern breeds providing the balance of cuts and taste preferred by today's consumers. Typical visitors to the farm are not aware of this. They simply see hogs and cattle. Visitors to the orchard during the harvest season will expect to have the opportunity to sample apples. Thus, production of edible fruit is a goal of this proposal.



### Irrigation

Production of a meaningful crop of apples on this farm would not have been possible in the 1920's without some form of irrigation, especially for young trees. This is because of the fine sand soil in the A horizon and sand and gravel in the lower horizons down to the water table. I assume that in such cases the children and hired help would have carried buckets of water to the trees as needed. This is unreasonable for this farm. Given the importance of providing visitors with the opportunity to sample the fruit produced and in good years sell fruit to offset operating costs, we propose installing a modern irrigation system. This would consist of a drip system with circular application elements to spread water over the root zone. This is necessary because of the high porosity of the sandy soil.

### Fertilization

The inclusion of fertilizer in the irrigation system, fertigation, should be considered. This may not be necessary since ample composted manure is at hand for manual application. Visitors will be warned not to eat fruit picked up off of the ground.

### Spraying

At least in commercial orchards in the 1920's, spraying was an established practice. Spraying of farmstead orchards however was probably much less common. This will be researched. Some mate-

(Continued on page 9)



rials used then are no longer permitted. These included arsenate of calcium and arsenate of lead! Dry lime-sulphur, Bordeaux mixture, and lime dust used then are still effectively employed by organic apple growers.

### Deer and Rodent Protection

Deer damage was not an issue in the 1920's. White tail deer were essentially extirpated from the state by the early 1900's by hunting and habitat destruction. They were reintroduced from stock in Missouri in the 1930's. Protection from deer is a must for apple orchards. Welded wire cages five feet high and 10 feet in circumference will be used initially at a cost of \$12 each. Once the trees come into production it will be necessary to consider fencing around the entire orchard. The trunks of the trees will be wrapped with commercially available plastic strips with holes for rodent protection.

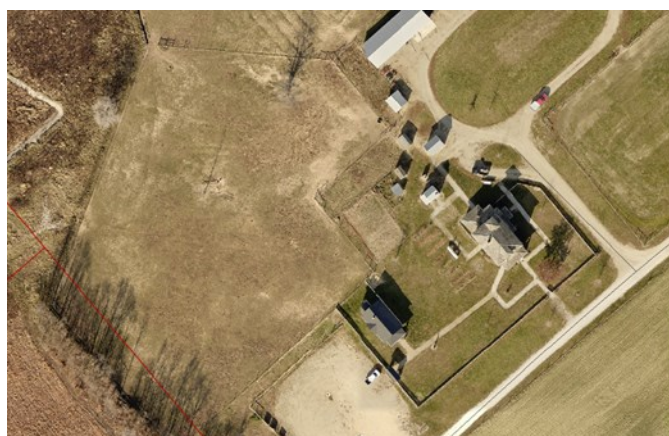
### Root Stock

Purchasing and shipping one each of whips of selected cultivars would cost \$60 to \$70 each. A less expensive approach is to plant root stock and graft in the field. The two Doud heirloom apple orchards north of Peru include most of the cultivars to be included. The owner/operators, Dave and Steve Doud, have agreed to allow us to harvest scion wood for grafting. Scion wood for other cultivars should be available from commercial sources, and a call can be put out to the industry in Indiana. Jim McKenna and Dick Hayden have agreed to do the grafting. 'Budagovski 118' is an appropriate selection since it does well on sandy soil and supports standard size trees. The cost for 3/8 inch caliper 9 to 12 mm would be [50@\\$2.225](#) = \$111.25, or [100@\\$1.425](#) = \$142.50 plus shipping from Oregon.



**The Farm at Prophetstown: Soil Map Overview:**  
StC Spinks fine sand, 6 to 12 percent slopes.

Productivity Ranking Factor – 0.62, i.e. 90 bushels of corn per acre.



**Orchard Map.** Rows 30 ft. apart. Rows 1, 2 and 3 – 10 trees each. Row 4 – 9 trees. Trees 30 ft. apart within rows.

### Cultivar Placement

Because the orchard will be on a slight slope, to maximize exposure to sunlight, shorter stature cultivars, few in number will be placed upon the ridge top and taller cultivars will be placed in the lower rows.



# Apple Cultivar List – Prophetstown SP - 2019

Orchard Position	No. to Plant	Cultivar	Harvest Season	Tree Size: T3 > T2 > T1	Culinary Use	Storage	Pollination	Disease Notes
4-2	1	Arkansas black	Late season	T3, T2	-	-	-	-
2-4	1	Ashmead's Kernel	Late season	T2	-	-	-	-
2-7	1	Baldwin	Late season	T2	Eat fresh, cider, cooking, dry	3 to 6 months	Self-sterile	Some susceptibility to scab, mildew, bitter pit, fireblight. Very resistant to Cedar apple rust
3-5	1	Ben Davis	Late September	T2	Eat fresh, baking and sauce	Keeps well	Granny Smith, Jon-A-	-
3-2	1	Cortland	Midseason	T2	Eat fresh, cook, juice, dry	Poor	Group 3	Some susceptibility to scab, fireblight and cedar apple rust
1-4	1	Cox's orange pippin	Midseason	-	All		Self-fertile	-
3-1	1	Early Harvest	July	T2	Eat fresh, sauce			-
4-5	1	Golden Russet	Late season	T3	Eat fresh, cooking, juice hard cider, drying	Stores 3 months or more	-	Scab - some resistance, cedar apple rust - some susceptibility
1-2	1	Goldrush	Very late	T1	Eat fresh, cook, juice, hard cider	3 months or more	Self-sterile	Bred for scab resistance. Improved Modern cultivar from Purdue.
3-6	1	Grimes Golden	Late September	T2	-	-	Self pollinating	-
1-1	1	Hayden Family Heirloom	-	-	-	-	-	Resistant and well adapted
2-10	1	Johnny Appleseed	Unknown	-	-	-	-	Variable
2-9	1	Jonathan	Late season	T2	Eat fresh, cook, dry	-	Partially self-fertile	Very susceptible to scab, fireblight and cedar apple rust. Some susceptibility to canker and mildew. Some resistance to woolly aphid.
1-8	1	King David	Late season	T2	All uses	1-2 months	Self-sterile	Good disease resistance
1-9	1	Liveland						
2-3, 4-10	2	Newtown Pippin	Mid October	T2	Store 1 month - eat fresh, cooking, juice	3 months or more	Self-sterile	Some susceptibility to canker, scab, mildew, bitter pit, fireblight
4-3, 2-8	2	Northern Spy	Late October	T3	Eat fresh, cook, cider, drying	3 months or more	Self-sterile	-
1-10	1	Oldenburg	-	-	-	-	-	-
3-9	1	Ralls Janet (Genet)	Early October	T2	See Old Southern Apples by Lee Calhoun	-	-	-
1-7	1	Reine Claude	-			-	-	-
1-6	1	Rhode Island Greening	Midseason	T2	Fresh eating, cooking, pies, cider	3 - 6 months	Plant with self-fertile cultivar	Very susceptible to fireblight, some susceptibility to Cedar apple rust
1-5	1	Rome beauty	Very late	T2	Eat fresh, cook, cider, dry	3 months +	Self-fertile	Very susceptible to fireblight and Cedar apple rust
3-8	1	Roxbury Russet	Late season	T2	Eat fresh, cooking, juice hard cider, drying	3 months or more	Self-sterile	Very resistant to scab, fireblight, cedar apple rust
2-1	1	Sheepnose/Black Gilliflower	Mid late season	T2	Eat fresh, dry	-	-	Some scab resistance - very resistant, mildew and fireblight; some susceptibility to cedar apple rust
4-7	1	Smokehouse	September	T3	Eat fresh, cook, dry	3 months or more	Other cultivar with same bloom period	Disease resistance - good
2-6	1	Spitzenburg	Late October	T2	Eat fresh, cook, juice	3 months +	Not self-fertile, Group 4	Very susceptible to fire blight, canker, scab, somewhat to cedar apple rust
4-6	1	Stayman's Winesap	Mid October	T3	Eat fresh, pies, desserts, applesauce, cider	Stores well in fruit cellar	G. Delicious, Jonathan, Rome Beauty	-
4-8	1	Summer Rambo	August	T3	Eat fresh, cook, dry	-	-	-
3-3	1	Tolman Sweet	Midseason	T2	Cook, hard cider, drying	-	-	-
2-2	1	Turley Winesap	Late Sep-Oct	T2	Eating quality less than Stayman	Stores well	-	-
1-3	1	Wealthy	Midseason	T1	Eat fresh, cook, dry	-	Group 3	Canker - some susceptibility, scab - very resistant, cedar apple rust - very susceptible
3-10, 4-9	2	White Transparent	Summer	T3	Sauce - pick before ripening	Poor	Compatible cv	Some resistance to scab and cedar apple rust
4-4	1	White winter pearmain	Late season	T3	Eat fresh, cooking	3 months +	Self-sterile	Some susceptibility to mildew and fireblight
2-5	1	Winter Banana	Late October	T2	Eat, hard cider, drying	-	Self-sterile, Red & Yellow Delicious	-
4-1	1	Wolf River	Late season	T3	Eat fresh, cook, dry	1-2 months	-	-
3-7	1	Yellow Delicious	Late September	T2	Eat fresh, pies, salads	-	Self pollinating	Also known as 'Golden Delicious'
3-4	1	York Imperial	Midseason	T2	Eat fresh, cook, hard cider, dry	Keeps well	-	Fireblight and Cedar apple rust - very susceptible. Best on heavy clay soil.



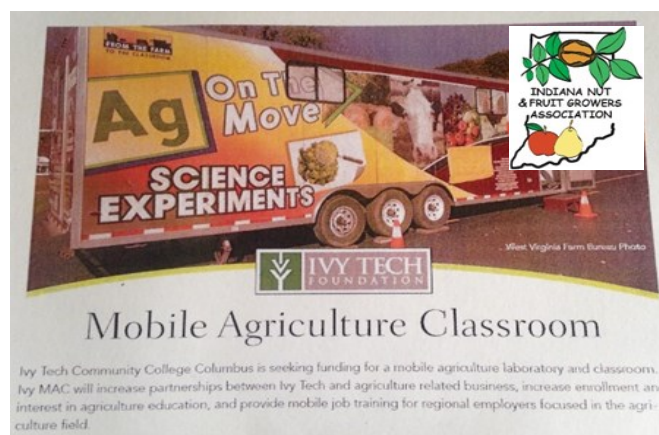
← N		Proposed New Prophetstown State Park Farm Orchar Map Layout									
Row- Tree	No. Trees	Cultivar	Row- Tree	No. Trees	Cultivar	Row- Tree	No. Trees	Cultivar	Row- Tree	No. Trees	Cultivar
4-1	1	Wolf River	3-1	1	Early Harvest	2-1	1	Sheepnose/Black Gilliflower	1-1	1	Hayden Family Heirloom
4-2	1	Arkansas black	3-2	1	Cortland	2-2	1	Turley Winesap	1-2	1	Goldrush
4-3	2 of 2	Northern Spy	3-3	1	Tolman Sweet	2-3	1 of 2	Newtown Pippin	1-3	1	Wealthy
4-4	1	White winter pearmain	3-4	1	York Imperial	2-4	1	Ashmead's Kernel	1-4	1	Cox's orange pippin
4-5	1	Golden Russet	3-5	1	Ben Davis	2-5	1	Winter Banana	1-5	1	Rome beauty
4-6	1	Stayman's Winesap	3-6	1	Grimes Golden	2-6	1	Spitzenburg	1-6	1	Rhode Island Greening
4-7	1	Smokehouse	3-7	1	Yellow Delicious	2-7	1	Baldwin	1-7	1	Reine Claude
4-8	1	Summer Rambo	3-8	1	Roxbury Russet	2-8	1 of 2	Northern Spy	1-8	1	King David
4-9	2 of 2	White Transparent	3-9	1	Ralls Janet (Genet)	2-9	1	Jonathan	1-9	1	Liveland
4-10	2 of 2	Newtown Pippin	3-10	1 of 2	White Transparent	2-10	1	Johnny Appleseed	1-10	1	Oldenburg

## Update on the Mobile Ag Classroom

By David Harrell

*(Editor's Note: The INFGA voted to fund a portion of this project [\$7.5K] at our May 2018 grafting meeting. We hope to be able to offer grafting demonstrations to students and the public to advance our mission in the future)*

The Ivy MAC project has passed a great milestone. We have secured enough funds to start the process of getting the trailer built and purchasing the truck. Three quotes were secured from Featherlite Specialty, RPM, and Millennium Trailers. A standardized set of requirements were sent to all three manufacturers for consideration. The quotes returned with great variance in quality of construction and price. RPM of Georgia was selected as the manufacturer. Their quote was of a superior construction at a lower cost than originally thought. This will enable us to purchase more supplies and equipment initially. The trailer is quoted at \$76,906.25. This price may vary slightly as we move through the engineering process. RPM will deliver us 2D and 3D cad drawing for review before manufacture. Their estimated delivery date is February for trailers that they are designing now. Our original budget was for \$99k. By using RPM we will have considerable cost savings. Some of the additional features that this manufacturer has as standard options include a walkable roof which will allow for easy maintenance and cabinets constructed of alumi-



num for durability while on the road.

The truck selected was an F-350 crew cab, 4x4, diesel. We have a potential donor that will supply fuel for this project. This will allow both the truck and the generator in the trailer to be diesel powered. The state of Indiana has a quantity purchase agreement program for all political subdivisions in the state. These pre-negotiated contracts allow for a pre-set price for vehicle and you simply select the options cafeteria style. The total for the truck will be \$40,489.

Our current timeline for getting the truck, trailer, and supplies in place will be March, 2019. There will be invitations to all our sponsors to our Ribbon Cutting celebration in the spring for the Ivy MAC once it is completed.

## 2018 IN REVIEW



Barbara Lehman, Preston Gwinn and Doug Fell arranging the Flower & Patio show display. Absent from the picture was Virlee Weaver



Loaded scion swap tables



David Harrell discussing the FFA Youth Education Trailer which INFGA is supporting.



Mick Perry and Mark Hildebrand running the grafting meeting auction.





John Harrell demonstrating grafting along with Jim McKenna



Doug Fell, John Harrell, Bill Deeter, and Bob Johnson looking over the grafting demonstration meeting auction items.



(Left) Peter Kuhns, Mick Perry, with Chris and Brian Heeter at their proposed repository site. (Above) A fireplace on the Heeter property that once was part of a log cabin along a spring that still runs.







Fall Meeting at Mick Perry's farm, Jerry Zimmerman and Mick Perry running the auction.

A view of Mick Perry's farm.

Photos by Kris Heeter

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## INFGA NUT EVALUATION ENTRY

Date: \_\_\_\_\_ Species: \_\_\_\_\_ Entry No. \_\_\_\_\_

### Tree Description

1. a. \_\_\_\_\_ Native Seedling \_\_\_\_\_ Planted Seedling \_\_\_\_\_ Grafted Tree

1.b. Clone/Cultivar Name or Entrant's Tree ID Code:

\_\_\_\_\_

2a. Estimated Age: \_\_\_\_\_ Years

2b. Circumference @ 4 1/2 ft.: \_\_\_\_\_ Inches

2c. Estimated Height: \_\_\_\_\_ Feet

2d. Average Crown Spread: \_\_\_\_\_ Feet

3. Location (legal description, driving directions, or town address)

\_\_\_\_\_

Sec \_\_\_\_\_

\_\_\_\_\_

Twn \_\_\_\_\_

\_\_\_\_\_

R \_\_\_\_\_

4. Average interval between nut bearing: \_\_\_\_\_ Years

5. Estimated Production (husked nuts)

This Year: #Nuts \_\_\_\_\_ Bushels \_\_\_\_\_ or Pounds \_\_\_\_\_

Last Year: #Nuts \_\_\_\_\_ Bushels \_\_\_\_\_ or Pounds \_\_\_\_\_

2 Years Ago: #Nuts \_\_\_\_\_ Bushels \_\_\_\_\_ or Pounds \_\_\_\_\_

6. Have nuts from this tree been entered in past INFGA (Indiana Nut and Fruit Growers Assn.) evaluations?

Yes \_\_\_\_\_ No \_\_\_\_\_ What Year? \_\_\_\_\_ Entry Number(s) \_\_\_\_\_ (if known)

#### **SPECIAL NOTES:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I have enclosed 15 nuts from the above tree to be evaluated by the Indiana Nut and Fruit Growers Association.

Send Form and Sample to:  
INFGA Nut Evaluation Committee  
%William Koehne  
9088 East Base Road  
Greensburg, IN 47240-8889

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Telephone: (    ) \_\_\_\_\_

Email: \_\_\_\_\_



## Small Farm Conference 2019



**Exhibitor Registration is Open**  
**Indiana Small Farm Conference**  
**Attendee Registration will open Dec. 3**

### Indiana Small Farm Conference

The 2019 conference at the Hendricks County 4-H Fairgrounds & Conference Complex, Danville, Indiana begins with a series of daylong workshops on Thursday, February 28. Topics include writing a food safety plan, vegetable crop planning, mushroom cultivation, biological orcharding and two tours: on the subjects of agri-tourism and livestock processing

Breakout sessions on March 1-2 will cover topics ranging from vegetable and livestock production to farm management and marketing. Participants will have an opportunity to network with Extension educators, expert speakers, other farmers and vendors. Check back for a complete list of speakers.

The Small Farm Trade Show takes place on March 1-2 where more than 50 vendors will showcase their products and services. The Small Farm Poster Session on March 2 will feature research and programs on local foods, diversified agriculture, and small farm production and education. Check back for details on the poster session.

Lunch is included with your registration. Catering will be provided by Lali Hess and the wonderful staff at The Juniper Spoon, using ingredients sourced from Indiana farms and food businesses.

The 2019 Conference Program will available soon.

<https://www.purdue.edu/dffs/smallfarms/small-farm-conference-2019/>

## INDIANA NUT & FRUIT GROWERS ASSOCIATION OFFICERS 2018

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*Volunteer Needed*

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812-298-8733  
JWLehmantree@Gmail.com

Contact these INFGA members for expert advice on all nut and fruit tree questions. If these growers can't help you they can often direct you to local member and provide you additional resources.

Tree	Contact	Phone	e-mail
Apple			
Black walnut	Bill Deeter	574-780-3449	billandsaradeeter@embarqmail.com
Brambles	Kay Grimm	317-408-0325	
Butternut	Bill Deeter	574-780-3449	billandsaradeeter@embarqmail.com
Chestnut	Bill Deeter	574-780-3449	billandsaradeeter@embarqmail.com
Hazelnut	Jim Collins	317-900-6827	
Heartnut	Mick Perry	574-946-3553	mickperry3553@yahoo.com
Rare Fruit	Kay Grim	317-408-0325	kaygrmm@gmail.com
Hickory	Fred Blankenship	270-272-7670	
Pears			
Pawpaw	Jerry Lehman	812-298-8733	jwlehmantrees@gmail.com
Pecan	Fred Blankenship	270-272-7670	
Persian walnut	Jim Collins	317-900-6827	
Persimmon	Jerry Lehman	812-298-8733	jwlehmantrees@gmail.com
Prunus	Thomas Werner	765-589-8820	

## Board of Directors

2016-2018	2017-2019	2018-2020
<p>Mark Hildebrand 7216 N. Co. Rd. 1100 W. Fairbanks, IN 47849 812-394-2356 paw.paw@frontier.com</p> <p>Jim McKenna 3216 Elkhart St. West Lafayette, IN 47906 765-464-1688 jrmckenn@Purdue.edu</p>	<p>Claude Diehl 8315 St. Rd. 26W W. Lafayette, IN 47906 765-490-4334 diehl421@gmail.com</p> <p>William (Bill) Koehne 9088 E. Base Rd. Greensburg, IN 47240 812-663-5273 wlkoehne@yahoo.com</p>	<p>Pam Howie 13555 Swoveland Rd. Hagerstown, IN 47346 434-987-4873 howiepunkin@yahoo.com</p> <p>Gary Herrmann 5920 #6 School Road Evansville, IN 47720 812-963-9184 gherrmann46@gmail.com</p>

### Annual Election Information

The slate of officers for the annual election are as follows:

Pres.-Jerry Batta  
VP-Bill Deeter  
Treas.-Doug Fell  
Secretary-Peter Kuhns

Two are to be elected to the board of directors

1. Phil Foster
2. Several have been contacted and asked to serve but at this point a 2nd. nominee has not been found.

The floor will be opened for nominations to each of the officer positions as well as board. Those named have agreed to serve another year. Board members serve for three years. If you are willing to stand for election and serve in any of the positions, especially board member, contact Jerry Lehman, JWLehmantree@Gmail.com or 812-298-8733.

### “Tulip Woods” – INFGA Tree Repository Planting proposal: Proposal

Kris and Brian Heeter

7054 E Tulip Rd.

Solsberry, IN 47459

Background: Tulip Woods is approximately 100 acres situated in Greene County. A majority of the property (approx. 93 acres) is old growth forest that includes tulip poplar, oaks, shagbark hickory, and persimmon to name a few. Approximately 70 of the 93 acres is Classified Forest with the DNR.

We have several acres that are non-forested. Notes at the end of the proposal include a summary of the fruit and nut trees planted in recent years.

**Proposed Acreage for the Repository:** 1 to 1.5 acre

**Description:** The proposed acreage sits close to Tulip Road and is easily accessible to visitors and is an ideal spot for further INFGA onsite demonstrations and meetings.

We propose 100 trees - a mix of species to include but not limited to those listed below. We would appreciate and invite members to give suggestions on the varieties they have had success with and/or would like to see available in the future for scion wood to members. We propose to work with the committee to determine the best overall layout and spacing.

Apple

Pear

Persimmon<sup>1</sup>

Mulberry<sup>2</sup>

Pecan

Hazelnut

Other? – we welcome suggestions

<sup>1</sup>Tulip Woods is home to native persimmon, with many females producing fruit. We propose discussing the options for persimmon with the expert INFGA members to determine the best course for increasing variety and with perhaps experimenting with grafting on some of the existing young native trees.

<sup>2</sup>Mulberry is starting to make news in some circles not only for the use of its fruit but also the leaves (high protein content).



## Great Links on the Web!

**Indiana Nut & Fruit Growers**  
<http://www.nutgrowers.org/>

**Northern Nut Growers Assoc.**  
<http://www.northernnutgrowers.org/>

**University of Missouri Center for Agroforestry**  
[www.centerforagroforestry.org](http://www.centerforagroforestry.org)

**Kentucky State University Paw Paw Program**  
<http://www.pawpaw.kysu.edu>

**American Chestnut Foundation**  
<http://www.acf.org>

**The Walnut Council**  
<http://www.walnutcouncil.org>

**Midwest Fruit Explorers**  
<http://www.midfex.org>

**Facts for Fancy Fruit Newsletter—Purdue:**  
<http://www.hort.purdue.edu/fff/fff.shtml>

**Indiana Division of Forestry**  
<http://www.in.gov/dnr/forestry>

**Thousand Cankers**  
<http://thousandcankers.com>

**Home Orchard Society**  
<http://www.homeorchardsociety.org>

 <p><b>INDIANA NUT &amp; FRUIT GROWERS ASSOCIATION</b></p>	<h3 style="color: blue;">INFGA Membership Form</h3> <p><b>2019 DUES (Jan 1 - Dec 31)</b></p> <p><b>\$10 per Year or \$125 Lifetime</b></p> <p style="color: blue;"><b>PLEASE CHECK ALL THAT APPLY</b></p>	<div style="border: 1px solid black; padding: 5px; background-color: #ffffcc;"> <p><b>How Did You Learn About INFGA?</b></p> <p>( ) ( ) ( )</p> <p><i>Friend Internet Meeting</i></p> </div>
<p><b><u>New Member</u> ( )    <u>Renewal</u> ( )    <u>Lifetime</u> ( )    <u>Address Change</u> ( )</b></p>		
<p>Payment \$ _____ ( )    _____ ( )    _____    _____</p> <p style="text-align: center;">CASH                      CHECK No.                      DATE                      YEAR</p>		
<p>Name: _____</p> <p style="text-align: right; margin-right: 100px;"><i>Spouse's Name</i> _____</p>		
<p>Address: _____</p>		
<p>City: _____ State: _____ Zip: _____ County: _____</p>		
<p>E-mail: &lt; _____ &gt;</p>		
<p>Phone 1: (____) _____ Phone 2: (____) _____</p>		
<p><b>*** KERNEL DELIVERY OPTIONS: <u>E-Mail</u> ( )    <u>Mail</u> ( ) ***</b></p> <p><u>Make checks payable to: INFGA</u></p> <p><b>Mail to: Mr. Jerry Lehman, 7780 Persimmon Street, Terre Haute, IN, 47802</b></p>		
<p><i>Your paid membership supports our mission and entitles you to receive the <u>Hoosier Kernel</u> newsletter, published four times a year in advance of our seasonal meetings. Paid members can print one free classified ad in the <u>Hoosier Kernel</u>. All INFGA meetings are free of charge to attend and everyone is welcome. Meetings feature a pot-luck lunch, educational talks, tours, or demonstrations. Live auctions of nut and fruit plant material, seeds and starts, tools, specialty items, and much more are a popular feature that help fund INFGA's meetings and educational programs.</i></p>		

**THE HOOSIER KERNEL**

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