

IOWA BIG TREE REPORT FOR JANUARY THROUGH JUNE OF 2024

SUBMITTED BY MARK ROUW, IOWA BIG TREE FIELD REPRESENTATIVE

I had some medical issues during this six months of tree measuring, but despite the setbacks, I was able to make good use of the time I had, and some significant trees were documented.

January 5th

I can't say the first tree I measured in 2024 was a new find. In fact, I had actually been aware of this tree since it germinated in about 1978. The tree is a persimmon, which I started from seed and planted in the yard where I grew up, near Grandview University in Des Moines. The seed was collected from one of three persimmon trees in Union Park in Des Moines. Interestingly, the tree I planted is now considerably taller than the parent tree! I never imagined I would be measuring a tree I planted for the Iowa Big Tree Register. This persimmon is the 5th largest known in Iowa, and the second tallest!

Circ. 4.92', height 61.75', spread 37', index 128.95, rank # 5

January 6th

Today I went to Thomas Mitchell Park near Mitchellville, to take a look at some shagbark hickories that Jeff Carstens reported. I worked for the Polk County Conservation Board as an Associate Naturalist in my younger days, so I was quite familiar with this County park. It would have been about 47 years ago that I first remembered seeing and measuring the trunk of a shagbark hickory at Thomas Mitchell Park. Over 45 years ago this shagbark stood out as being larger than most. Before revisiting that tree, I first measured one standing close to the north end of the park. I found this shagbark hickory to have the following dimensions:

Circ. 7.625', height 79.58', spread 54', index 182.08, rank # 13

While hiking on one of the trails in Thomas Mitchell Park, I noticed what looked like a sizable bitternut hickory. I don't see many big bitternut hickories anymore, possibly due to hickory decline, which was first identified about 15 years ago in the upper Midwest. The affected trees have a fungus which causes cankers, and hickory beetles are associated with the diseased trees. After measuring the bitternut, I determined the tree to have these dimensions:

Circ. 7.25', height 103.17', spread, spread 51.5', index 203.045, rank # 6

The next tree I measured at Thomas Mitchell was a red elm. Red elms are another species that are becoming more scarce, especially large specimens. For the most part, red elms fared better than American elms during the earlier waves of Dutch Elm Disease (DED). In recent years, however, I have noticed more red elms are succumbing to DED. Today, I don't know of a single red elm I would describe as impressively large. A couple of decades ago I probably wouldn't have bothered measuring a red elm the size of this one, but today it is of interest. In the past, I measured three Iowa red elms with trunks measuring over 16'! Here are the dimensions of the red elm:

Circ. 7.375', height 81.83', spread 53.5', index 183.705, rank # 6

I arrived at Thomas Mitchell fairly late in the day, and before long it was getting too dark to measure trees.

January 7th

I returned to Thomas Mitchell and the first tree for the day was another red elm of similar size to the one measured the day before. Here are the dimensions of the second measured red elm:

Circ. 7.04', height 86.25', spread 57', index 185, rank # 5

I checked a few of the other hickories that Jeff noted, but none of them appeared to be larger than the hickory from the previous day, so I decided they weren't a priority to measure. After covering most of the park, it was starting to get dark, and I still hadn't checked out the shagbark hickory I measured 47 or 48 years ago. With luck, there would be enough light to finish measuring the tree. When I reached the site of the hickory, I could tell it had grown. It had a different look from the other hickories. It had the appearance of a very old tree, with a big trunk and thick limbs. When I measured the trunk over 45 years ago, it measured 7'. I was able to determine the hickory to have the following dimensions just before it became too dark:

Circ. 8.08', height 81.75', spread 52.5', index 191.875, rank # 9

Over 47 years, the girth of this tree increased 13 inches, which is just a little over ¼" increase in circumference per year. I was able to enjoy a short night hike back to my car.

February 7th

Sometime earlier, I was contacted by the owner of an American elm to see if I would be willing to come and measure her tree. Several months had passed, but I finally went to measure the elm which grew near Maxwell. The tree stood on high ground, and it had a noticeable lop-sided appearance due to the persistent southwest wind shaping it over the years. I found the tree to have these dimensions:

Circ. 16.125', height 62.5', spread 95', index 279.775, rank # 12

February 9th

I was told about a potentially large bigtooth aspen near Keota sounding too big to be true. After reaching the site, it wasn't long before I could see a stand of aspens, or something, in the timber not far away. As I approached, I was not encouraged by what I saw. Although there was a strong superficial resemblance to bigtooth aspens, I was skeptical. To me they looked more like an upright form of a white poplar. I measured the largest example, but since it was not an aspen, the information was not recorded on the spreadsheet. The tree may have been part bigtooth aspen, but if so, it was a hybrid tree. Why there was a stand of hybrid aspens at this location, far from a dwelling, remains a mystery. Near the hybrid poplars stood a couple of tall hop hornbeams. One had recently died and both trees appeared to have a height of about 55', which is quite tall for Iowa.

The next stop of the day was to check out a reported big elm located near Richland, south of Keota, in southeast Keokuk County. American elms can show quite a bit of differences between individuals, and the bark of some can be quite dark. However, the bark on the limbs of this one was quite light. I wondered if it could be a hybrid elm, but after studying it more closely, I decided it was an American elm. After measuring, I determined the elm to have the following dimensions:

Circ. 15.67', height 64.5', spread 93', index 278, rank # 14

I thought it was interesting that this elm, and the one I measured two days earlier in central Iowa, were very similar in size. The index for today's elm was within two points of the previous one!

Baily Yotter had told me about a couple of big trees in Weed Park, and now it was on to Muscatine to check out the trees. One was a butternut, which is likely a hybrid tree. From what I have learned, most planted butternuts are hybrids. Scott Carlson joined me, and here are the dimensions we determined for the butternut:

Circ. 11', height 53.83', spread 65.25', index 202.143, rank # 2

The other tree was a staghorn sumac located not far from the butternut. Here are the dimensions of the sumac:

Circ. 3', height 33.17', spread 22.5', index 75.295, rank # 1

I had not seen a sumac of this size since measuring one in Dubuque County in 1985 that reached a height of 38'.

After leaving Weed Park, Scott and I headed to nearby Buffalo to update the measurements of a pecan that I first measured in 2008. Below you will find the measurements from 2008 and the updated dimensions:

Circ. 9.33', height 83', spread 77', index 214.25, measured in 2008

Circ. 11.58', height 91.58', spread 83.125', index 251.361, rank # 6

Although shagbark hickories are slow growing, pecans are a hickory capable of some pretty fast growth. This pecan had been averaging about 1.90 inches of increase in circumference per year, which is impressive. I should point out, this time I probably measured the circumference slightly lower down the trunk than I did in 2008. I now try to take into account the amount of soil that has built up around the base, which can result in the circumference measurement at 4 ½' coming down several inches. Even taking this into account, the Buffalo pecan has done very well over the last 14 years!

February 14th

I measured three bur oaks in Des Moines today, and my first stop was to update the trunk circumference of one in Union Park. I grew up not far from Union Park, so I'm familiar with all of the mature trees, and many that are no longer standing. In the vicinity of the bur oak I planned to measure once stood a larger bur oak. It developed a split and has been gone for over twenty years. Here are the dimensions of the lesser bur oak that is still standing:

Circ.13.33', height 83', spread 83.5', index 251.361, rank # 15

I went on to measure a bur oak at Woodland Cemetery and one in Drake Park, both in Des Moines. Although above average in size, they were not what I would describe as exceptional. The Woodland Cemetery oak had a circumference of 12.5', and the one in Drake Park measured 12.79'. The Drake Park tree was struck by lightning perhaps two decades ago, leaving it with a large wound, perhaps ten feet up and down, and about 30" wide at the widest spot. There is good wound-wood around the edges of the scar, and it will be interesting to watch it in the future. I was very disappointed to see someone had used some kind of a tool, or something with a sharp edge, to repeatedly strike the trunks of several trees in the park. They didn't settle on just destroying the bark, they kept hacking away until they went through the cambium and beyond, causing some significant wounding!

March 7th

I went to Indianola which is a significant place for big trees, especially when you consider the relatively small size of the town. At one time it was much more significant. Three impressive state champion trees have been lost; a tamarack, an American smoke tree, and a white mulberry. My first stop was to check on the state champion nannyberry, which grows on the grounds of the city library. The updated dimensions are as follows:

Circ. 3.5' (@28"), height 25.5', spread 27.25', index 74.233, rank #1

That is a big nannyberry, but I measured another one of comparable size in 1995, near New Hampton. That tree was shown to me by Bill Smith, who owned Smith Nursery in Charles City. For years, I collected acorns from a variety of oaks for Bill.

The next stop was the Indianola Cemetery at the south edge of town. There are two large arborvitaes here, and I found them to have the following dimensions:

Circ. 10.75' (@2), height 45.42', spread 40.25', index 189.483, rank # 5

Circ. 10.71', height 51.08', spread 46', index 191.08, rank # 3

There are some impressive white pines in the cemetery, and here are the dimensions of the second largest one:

Circ. 13.96', height 85.33', spread 70.75'. index 270.5175, rank # 20

I only updated the trunk circumference of the largest one, which was the first state champion white pine before larger trees were found. The circumference now measures 16.33'!

March 13th

I went to southern Iowa to check on a couple of Osage oranges in Davis City, and pitch pines in Lineville. There are several Osage oranges in Davis City, including a former champion and the current champion. The former champion has a circumference of over 17', but I'm certain it is actually a fusion of more than one trunk. Another one, further west on the same street, is the new champion. Later, after examining photos of the tree, I suspect this one is a fusion as well. The primary trunk is still big, so I think I will try

to measure the trunk as if the much smaller secondary trunk wasn't part of the main trunk. It will be tricky, but I think it can be done. This will reduce the trunk circumference and the spread, but I think it will remain the champion. Have I mentioned, it is very hard to find Osage orange trees with a single trunk? I updated measurements of another Osage orange located on the same street in Davis City. Here are the dimensions of the current champion which includes the likely merged trunk:

Circ. 13.21', height 67', spread 68.5', index 242.625, rank # 1

The other Osage orange has a single trunk! Here are the dimensions of the tree:

Circ. 10.75', height 56.58', spread 60', index 201.58, rank # 4

From Davis City, in Decatur County, I drove to Lineville, in Wayne County. I was curious to know if any of the pitch pines in the cemetery still remained. I believe there was still one standing the last time I visited the cemetery. It didn't take long to see there were no pitch pines!

For a while, this cemetery held the champion pitch pine, and the largest Scotch pine. I think I may have mentioned in a previous report; the Scotch pine was large enough to become a national champion, but it was cut; There was a honey bee hive in a hollow, and a child was stung. To solve this problem, the tree was cut down! In Lineville, I noticed a big white mulberry and I intended to measure the circumference, before heading north towards Chariton, and then home. There is a pitch pine in Chariton, and I was hoping to touch base with the owner. I went to grab my tape measure and it was nowhere to be found. Where was it? Ah, I remembered measuring the trunk circumference of the second measured Osage orange in Davis City, but I couldn't remember taking the tape off of the trunk!

I typically leave the tape wrapped around the trunk of trees so I can see the point 4 ½ feet above the ground. This is one of the steps used when measuring the height. After determining the height, some calculations are made on the site to calculate the height. This is what got me into trouble; I was some distance away from the tree and anxious to get going to Lineville, and I forgot all about my tape. Instead of going north from Lineville, I had to backtrack to Davis City. It was dark when I arrived, but my tape was still on the trunk of the Osage orange!

March 15th

I had received a letter from a woman who lived near Sully, in Jasper County, requesting I measure her big elm tree. Judging from the photos, the elm appeared to be a hybrid elm with a questionable trunk. I was traveling on some roads south of Newton that were new to me when I spotted a potentially large cottonwood.

I stopped at the house nearby and the owner gave me permission to check out the tree. It was big, with a circumference of 18.58', but the crown had suffered considerable storm damage. This reduced the height enough I decided not to take the time for the other measurements.

Next, I headed towards Mount Zion Cemetery northwest of Killduff. Earlier, I had been studying satellite imagery of Jasper County and noticed some of the trees in this cemetery looked unusual. As I was approaching the cemetery, I could see the trees in question were ponderosa pines. Not far from the largest ponderosa pine was the stump of another ponderosa pine I suspect was equally as large, or larger. The

satellite imagery showed the tree which was gone cast a longer shadow, so it may have been a taller tree. Here are the dimensions of the first measured ponderosa pine:

Circ. 9.67', height 67.42', spread 38.5', index 187.045, rank # 3, co-champ

At the time of measurement, the above ponderosa pine was the second largest until a larger one was measured on the U of I campus in June.

The next tree I measured was an arborvitae. I found it to have the following dimensions:

Circ. 9.5' @40", height 47.83', spread 35', index 172.58, rank #12

At the far west edge of the cemetery stood another ponderosa pine with the following dimensions:

Circ. 8.04', height 68.83', spread 42.625', index 175.906, rank #8

Now it was time to go see the elm west of Killduff, and north of Sully. The tree was a hybrid elm, and as expected, the trunk appeared to be a fusion of trunks. I took measurements of the tree out of respect for the owner, who was very nice. Even though the tree was nothing to get excited about, I was given a history lesson about the house, which over the years had several additions added to the original pioneer house!

My last stop for the day was the town of Monroe, of which I was already familiar. One of my early big tree finds was a state champion bitternut hickory in Monroe. It is interesting that when I found the champion bitternut hickory, there was a metal tag on the trunk, identifying the tree as a shellbark hickory!

After a short reign at the top, this bitternut hickory which stood in the city park was removed in 1983. A limb had fallen from the tree and it damaged the fence bordering the park. The tree was not inspected by an arborist. Instead, someone from the forestry department of the DNR determined the tree should be taken down. I didn't believe the tree was a hazard tree, but I didn't have a say in the decision. However, I was able to procure a cross section of the trunk. A two man saw was used to cut the slice so the cut surface would be smooth. Well, it turned out smooth but not straight. I would have liked to help cut the slice, but I had not yet recovered from a recent surgery. I spent hundreds of hours working to correct the uneven surface!

Later, I documented a champion Austrian pine in the Monroe Cemetery, but it succumbed to Diplodia tip blight a few years later.

As I drove around the town of Monroe, I was not expecting to find anything of any real significance, but just as I was about to head home, I spotted a rather large looking hackberry. I measured the tree and found it to have the following dimensions:

Circ. 14.83', height 76.5', spread 88', index 276.5, rank #2

On the way home I made one more stop in Prairie City. After all, there might be time to measure one more tree before it would be totally dark. I had just enough light to update the dimensions of the third largest blue spruce. You can actually see this tree when driving by Prairie City on nearby highway 163. Here are the dimensions of the spruce:

Circ. 8', height 84.75', spread 27.5', index 187.625, rank #3, co-champ

March 30th

Every year, I send out letters to big tree owners requesting permission to measure their tree. My response this year was very poor. I did, however, get a positive response from the owners of a large silver maple in West Des Moines. The couple who owned the property, were very interested in the measuring process, and the results! I found the maple to have these dimensions:

Circ. 16.5', height 73.25', spread 77', index 291, rank #10

April 6th

Some time ago, Jeff Carstens told me about a good sized persimmon located in Sidney. The goal for the day was to measure this tree and measure a few other trees along the way. My first stop was Atlantic, which has several good trees. Two of the biggest and best ponderosa pines in Iowa stand in the Atlantic Cemetery. I only updated the circumference of the trees, so the other dimensions are a couple of years old. The dimensions of both pines are listed below:

Circ. 9.5', height 61.42', spread 45.75', index 186.858, rank #3

Circ. 8.58', height 69.92', spread 50', index 185.42, rank #5

Next it was on to the Cass County Courthouse in Atlantic to update the trunk girths of two white firs on the courthouse grounds. The height and spread dimensions of the Atlantic white firs are from 2018. Here are the dimensions of the firs:

Circ. 11.96', height 73.58', spread 43.75', index 228.018, rank #4, co-champ

Circ. 12.17', height 64.92', spread 62.25', index 226.483, rank #5

The # 4 white fir above, is within 3 percentage points of the # 1 tree, so it qualifies as a co-champion.

My next stop was in Clarinda, and I was anxious to check out a big pin oak I remembered from looking at satellite imagery. Clarinda is the county seat of Page County, and the pin oak stands on the courthouse lawn. When I saw the tree, I was not disappointed. The circumference and spread dimensions even exceeded my expectations, and that is a great feeling! Since the loss of the largest ever Iowa pin oak from Davenport, I have been lamenting the paucity of large quality pin oaks in Iowa. This tree has the size and quality that I had been hoping to find. The current champion pin oak resides in Des Moines but it is not without problems. The new co-champion from Clarinda is within two points of the champion, but if the volume were to be calculated, I'm confident the Clarinda pin oak would be larger.

Even though this tree was a great find, there was a downside. Recently, a large limb that would have extended over the street where cars park at the town square, had been removed. The cut was made at the right place, but it left a very large wound. That was bad enough, but apparently in the process of removing the limb, a large piece of bark was dislodged from the trunk, and another patch of bark was missing at the base!

Looking around Clarinda, I spotted a good sized sycamore on the library grounds. Here are the dimensions of the tree:

Circ. 14.5', height 97.5', spread 84', index 292.5, rank # 27

My survey of Clarinda turned up two large Norway spruce in one yard, and another big one across the street. I measured the largest one which was from the yard with two Norway spruce. Here are the dimensions of the spruce:

Circ. 10.625', height 98.58', spread 52.25', index 239.143, rank #18

Before being sidetracked by other trees, I thought I should document the persimmon which, after all, was the primary objective of the trip! The persimmon grows in a yard along Main St. in the south part of Sidney. I had contacted the owners before the trip, so they were expecting me. The tree was damaged by a storm years ago which reduced the height significantly, but it appeared to be among the biggest in Iowa. I determined the tree to have the following dimensions:

Circ. 7.29', height 54.17', spread 35', index 150.42, rank #3

The next significant tree was one I had seen before, but I had forgotten about it until I saw it again. On my first tree hunting trip to Waubonsie State Park, I drove through Sidney on my way home. I saw an American chestnut tree, but since it was getting dark I didn't stop. I meant to make a note about the tree but I never did. After seeing the tree again, it all came back to me. This time I stopped! The owner wasn't home but I left a note. After a closer look at the tree, I could see it was considerably bigger than my first impression from 2016. I went back to the owners of the persimmon to see if they would help me contact the chestnut owner. Luckily, they knew the owner and called them for me. It would be a while before the chestnut owner would be home, so I decided to update the trunk circumference of the number three red cedar which stands in the Sydney cemetery.

When I reached the cemetery, I could see that about the top three feet of the tree was dead. The height will likely be decreasing, but the trunk is still growing at a good rate. Only the circumference measurement is current, the height and spread dimensions listed below are from 2016. Here are the dimensions of the Sydney red cedar:

Circ. 10.08', height 68.08', spread 38.75', index 198.768, rank #3

When I returned to the site of the chestnut, the owner was home. He was cooperative, and I was able to get the tree measured before it was completely dark! We will never see another champion American chestnut like the former champ that stood in Dankwardt Park, in Burlington, but this one is the closest to it I have seen! Unfortunately, it was not in the best shape. The storm damage was hard enough to take but, the damage caused by pruning was especially disappointing. A primary leader in the crown had been heavily pruned. All of the lateral limbs and branches heading toward the power lines had been removed. Now there was a long vertical strip of bark missing on the side of the limb where branches had been removed. The area of exposed wood is not only long; it is well over a foot wide in places. The wounding is severe enough that I don't anticipate the tree will be able to recover! Here are the dimensions of the new champion American chestnut:

Circ. 12.83', height 69.58', spread 53.5', index 236.955, rank #1

April 9th

Today I am headed to Cedar Falls, where in the evening, I will be presenting my "Largest and Tallest Trees of Iowa" program for the Prairie Rapids Audubon Society. Naturally, I plan to measure some trees along the way.

My first stop would be Belle Plaine. The champion river birch stands in Franklin Park on the east side of Belle Plaine. Jeff Dierks, from Cedar Falls is the one who told me about this tree years ago. On my last visit, several years ago, I noticed there was a large dead limb in the crown, and I thought the tree was on the way out. I really suspected, by now, the tree would no longer be standing, but prior to the trip, I contacted the Belle Plaine Parks Department, and to my surprise, I learned the tree was still standing! While driving through Belle Plaine to reach the birch, I noticed an interesting tree one block away to the south.

This is a tree I remembered seeing on a previous visit. At that time, I remembered thinking that it could be an American larch, also called a tamarack. I remember discounting that possibility because its branches were too pendent, and it was too large for a tamarack. Seeing the tree again, I decided to take a closer look. I kept thinking, this can't be a tamarack, it's too big. As I came closer to the tree, it was looking more and more like a tamarack, but I would need to see the cones or get a close look at the bark. The tree stood in the backyard, so I parked on the street and walked down the alley to get closer. I was astonished to see; this was indeed an American larch. I had never seen a tamarack with a trunk that big! The owners were home and I was permitted to measure the tree.

The main trunk bifurcated at about 45 feet, and both leaders had been snapped off a few years earlier. The owner confirmed my suspicion. The tree had been damaged by the 2020 derecho. Where the larger trunk broke, the diameter was about 7 inches. Had the top of the tree not been lost; it would have been perhaps 15 feet taller! The tree sure could use some pruning. Besides the branches that have snapped off, there are several hanging limbs that need to be addressed! The owner stated that seven tamaracks were planted in Belle Plaine many years ago, but this is the only one remaining today!

Here are the dimensions of the new co-champion tamarack:

Circ. 8.75', Height 55.08', Spread 59.75', Index 175.08, Rank #1 Co-champion

Now it was on to the river birch in Franklin Park. As I approached the tree, I could see the dead limb that I remembered had been removed, and overall the tree didn't look too bad. I found the birch to have these dimensions:

Circ. 11.67', height 69', spread 98', max. sp. 112', index 235.875, rank #1

My next tree to visit was a big red oak that grows in La Porte City. This is a tree I spotted from viewing satellite imagery of the area. The height was not the best feature of the tree, but the circumference and spread were impressive. The owner appreciated the tree, and he learned some of the history of the tree from the former owner. The tree was reported to have been planted in 1898. The oak has several dead

limbs but it was generally in good shape. The number one and two red oaks are co-champs, but they are not without problems. It is nice to have another good sized red oak waiting in the wings.

April 10th

My program for the Audubon Society the night before went well, and I was invited to spend the night at Tom Schilke's home in Cedar Falls. Tom is the president of the Prairie Rapids Audubon Society. Since it was late, I accepted his offer. In the morning, Tom made me breakfast, and he even accompanied me to check out some trees in Cedar Falls and Waterloo. The first tree of the day was a white pine in Cedar Falls that I had found several years earlier. Here are the dimensions of the pine:

Circ. 12.125', height 96.33', spread 57', index 254.705, rank #58

The owners of this tree were interesting people. They proceeded to tell us about the young falcons that fell out of the tree the previous spring. I was a little skeptical at first, but it turns out there had been documented nesting of merlins in the area. Merlins typically use an old crow nest to rear their young.

Our next stop was to meet with the Waterloo City Forester, Todd Derifeld. He gave us the location of a large silver maple and the name of the street was familiar. Someone else had told me about this tree, but after looking at the tree using Google Street View, I decided the trunk was likely a fusion. After seeing the tree in person, I was quite impressed despite the questionable trunk. You just don't see open grown silver maples with the height of this tree. Although the trunk appeared to be a fusion, I'm not certain that it wouldn't qualify as a single if measured below 4 ½'. I measured the trunk at 4 ½' but in the big tree register, I described the tree as a fusion. It is too bad the trunk is probably a fusion because if it were not, it would be a very impressive new champion! Tom and I determined the maple to have the following dimensions:

Circ. 22.42', height 94.67', spread 94.33', index 387.254, rank #1 on points but probably not eligible

The next tree was a ponderosa pine I had notes on but I had never measured. We got lucky because the owner was home and they were cooperative. The tree had these dimensions:

Circ. 7.58, height 74.17', spread 40.875', index 175.388, rank #10

Next Tom was going to take me to a tree he thought was a ponderosa pine. The tree was actually an Austrian pine, but it was a good sized one. The tree along with another smaller Austrian pine grows in the strip of land between Kimble Avenue and a frontage road to the west.

It didn't take long to notice there were a pair of merlins that were very active around the top of the tree. We parked at a Subway restaurant which was just across the frontage road from the pine. After measuring the tree, we went inside to eat lunch. From our table we could see the pine and the merlins. It was while we were eating lunch that I noticed what appeared to be a nest. Besides the merlins, there were one or two crows who were in the tree as well. Later, I asked Tom about the merlins in the pine, and he said they didn't nest. Apparently the nest we saw was an active crow nest, so the merlins would have had to move on.

The crown of the pine extended over the frontage road to the west, and over the southbound traffic of Kimble Ave. to the east. I thought I may have to return to measure the spread when there was less traffic,

but we were able to get it done without getting hit or even obstructing traffic! The Austrian pine had the following dimensions:

Circ. 9.5', height 59.08', spread 47', index 184.83, rank #1 co-champ

From the Austrian pine we headed for the location of a pitch pine, which is a species I referenced earlier in this report. Generally, pitch pines are not a very attractive tree. The crown is often irregular, rather sparse and the needles are a yellow-green which gives them a sickly appearance. They are also prone to having burls and they usually have needles growing right from their trunks! The tree grows near Mercy Hospital in Waterloo, and may stand in Sartori Park. Here are the dimensions of the pitch pine:

Circ. 7.83', height 47.67', spread 47.75', index 153.607, rank #2

After leaving the pitch pine we headed for a ponderosa pine in Greenwood Cemetery in northwest Cedar Falls. There is a long single row of ponderosa pines at the northwest corner of the cemetery, and we measured one of the two biggest trees. I remember measuring this tree back in the 1980's but my previous measurements are not listed on the spreadsheet. Today we determined the following dimensions for the pine:

Circ. 7.67', height 70', spread 40.75', index 172.188, rank #12

After measuring the ponderosa pine, Tom and I parted ways. I headed towards Waverly, to check out trees in the Waverly Cemetery. I measured a large red cedar here the year before, but I had neglected to record the spread! It turns out it was time to update the spread anyway, since recent pruning had reduced the spread. Here are the dimensions of the cedar:

Circ. 8.83', height 70.5', spread 33.5', index 184.875, rank #7

I remembered seeing a good sized Norway spruce here from my first visit. It was getting late in the day and I debated with myself whether or not I should take the time to measure the tree. Well, I was there, so I decided to go ahead and get it documented. Here are the dimensions of the Norway spruce:

Circ. 12.5', height 91.83', spread 52', index 249.33, rank #8

I thought I would be headed home, but before leaving the cemetery a Douglas-fir caught my eye. The Douglas-fir had these dimensions:

Circ. 8.5', height 78.17', spread 54.5', index 188.295, rank #12

After a brief stop in Voorhies to admire a beautiful cottonwood, it was time to head home. I drove through Grundy Center, and I noticed a fair sized northern pin oak. The owners weren't home, so hopefully I can get it measured another day. Now I was finally heading home without any more stops! Not long after leaving Grundy Center, it looked like the sky was shaping up for a colorful sunset. Just as I suspected, the sky was becoming more colorful as the minutes passed. It crossed my mind that I might be able to reach the Albion Elms before it was too dark for photos. There are two large American elms near Albion that stand perhaps two hundred yards apart. However, only the south tree that stands on high ground would be suitable for photographing this late in the day.

Now I was in a race to reach the elms before the sun dipped below the horizon. I was wishing I was closer, because the sky was already nearing its peak. It seemed to take forever, but finally I reached the gravel road leading to the Albion Elms. Would there be enough light by the time I arrived? Instead of going to the owner's home, I came to an abrupt stop on the road and hurried to get my camera. For the low light conditions, I would have liked to use my tripod, but I just couldn't take the time.

The owner recognized the good lighting conditions as well, because she was out taking photos of the tree! I was taking photos from the road ditch, until she said I could open the gate and drive into the pasture. I drove closer to the elm, and then I continued to snap photographs. After a few short minutes the window of daylight closed. Now, finally, it was time to head home!

April 27th

Today Shane Straka and I headed toward the Wellman area to check out a sycamore reported to me by Cassidy Widner. Cassidy is a state district forester from Fairfield. Along the way, we stopped to see the champion cucumbertree located west of North English. The tree stands in the open which is good for photographs, but with no other trees or hills nearby, it is subjected to the full force of any storms that pass through. Although it has had some storm damage, it's in relatively good shape despite the exposed surroundings. Here are the measurements we determined for the champion cucumbertree:

Circ. 15', height 61.08', spread 76.75', index 269.108

Now it was off to the sycamore near Wellman in Washington County. The original plan was to meet forester Cassidy Wilder at the residence of the owner of the land where the tree stood, but she was unable to meet us at that time.

After arriving we met the owner Chris, and soon we were on our way to the sycamore. Chris provided plenty of interesting information about the area. We passed over an area close to a cliff, and Chris told us that spot was called Rattlesnake Ridge. The rattlesnakes here would have been timber rattlesnakes which have been extirpated from Keokuk County. As we descended, we kept curving, and soon we were at the foot of Rattlesnake Ridge. Now we were on the bottomland of the English River where the sycamore grew.

When we reached the tree, I was disappointed to see the top of the tree had been taken out by the 2020 derecho. We found the sycamore to have these dimensions:

Circ. 17.33', height 90', spread 94', index 321.5, rank #14

After backtracking to our car, we started heading towards Des Moines, but there was one more stop to make. We stopped in Sigourney to update the circumference of the state champion American elm. The height and spread measurements are from 2022. Here are the dimensions of the largest known remaining American elm:

Circ. 17.92', height 71, spread 125.5', index 317.295, rank #1

This was my first trip after having a detached retina. Once a retina becomes detached, a person's vision in the affected eye is never the same. Between the bad retina, an astigmatism and a cataract, I wasn't seeing very well.

May 12th

Shane Straka and I went to Winterset to measure a persimmon I had been anxious to measure for quite some time. We were able to meet the owner and his daughter before measuring the tree. I had trepidations because it was a sunny day, and my pupil was still dilated. Measuring the height and spread wasn't too bad but looking straight up at the sky was difficult. Here are the dimensions of the persimmon:

Circ. 6.71', height 67.5', spread 34.21', index 156.553, rank #2 co-champion

The next tree to check was a very tall pecan which stands on city property in Winterset. This tree is one of three known pecans in Iowa that just surpasses 100' in height. We found the pecan to have these dimensions:

Circ. 11.375', height 102.17', spread 89.71', index 261.065, rank #4

With a height of 102.17', this is the tallest pecan in Iowa!

Now we headed to the Winterset Cemetery to measure one of the largest Douglas-firs in Iowa. Winterset has had some severe storms in recent years, including a tornado which took out several trees in the cemetery. Fortunately, the big Douglas-fir was still standing. The tree is looking rather sparse, and I'm concerned about the future of this tree. The number one Douglas-fir in Dubuque is looking even worse! I wonder if sickly Douglas-firs in these manicured settings would benefit from fertilization. I was hoping to update all of the dimensions, but a storm was approaching so we settled for only a trunk circumference update. Here are the dimensions of the Winterset Douglas-fir. The height and spread dimensions are from 2017:

Circ. 9.125', height 83.17', spread 44.5', index 203.795, rank #2

June 8th

Using satellite imagery, I had found a good sized American Elm in Council Bluffs, and today I hoped to get it measured. I had not driven my car since my eye surgery, so I was somewhat apprehensive about this trip. My pupil was still dilated, so I chose to go on this day because the weather forecast for Council Bluffs was cloudy. When I arrived in Council Bluffs the sun was shining. My first stop would be to a pharmacy, so I could purchase some shades that would fit over my glasses. It took a while to find the right size, but after returning my first purchase that was a little too small, I was finally set. I stepped outside and the sky was cloudy!

I found the elm, which stood on the parking right of way, in west central Council Bluffs. Since the crown extended over private property, I would need permission from the adjacent owner to measure the spread. Luckily the owner was available and cooperative. It took quite a while to get the spread measured because of the adjacent houses and the cars parked on the street. I found the elm to have these dimensions:

Circ. 14.125', height 70.67', spread 107.5', index 266.045, rank #17

June 15th

Today, Shane Straka and I were headed to Iowa City, primarily to check on some trees on the U of I campus. Originally this was supposed to be a tree measuring workshop, but not enough people registered. Since Andy Dahl had the time set aside, and Scott Carlson was still willing to come, we decided to do our own workshop to document the size of a few trees on the campus!

One of the trees of interest was a blackhaw that Andy and his crew had saved. The blackhaw was slated for removal because it stood in the way of a construction project. A big thank you goes out to Andy from me for rescuing the only blackhaw I know of in Iowa! The small tree has several trunks and we measured the two largest ones. Here are the dimensions of the two blackhaws:

Circ. 1.58', height 24.75', spread 22.5', index 49.375, rank #1

Circ. 1.71, height 23.83', spread 18.665', index 48.996, rank #2, co-champ

Next, Andy took us to an English elm on the west side of the Iowa River. It would be interesting to see how this tree compared to the state record in Davenport. The Davenport English elm has 229.104 points. Here are the dimensions of U of I English elm:

Circ. 10.25', height 90.25', spread 45.83', index 230.406, rank #1, co-champ

It was 1985 when I first noticed some big ponderosa pines on the west side of the U of I campus. One had a pretty big trunk but it wasn't nearly as tall as the champion from Ellis Park in Cedar Rapids. Since the Cedar Rapids champion was lost in the derecho, it was time to get the Iowa City tree documented. We determined the largest ponderosa pine in the stand to have these dimensions:

Circ. 8.67', height 79.58', spread 37.175', index 192.768, rank #2 co-champion

This tree is only one point smaller than the champion from Armstrong Iowa. Although the dimensions are impressive. This co-champion is not without problems. The pine only looks good in the upper part of the crown; the rest of the tree has many dead limbs. The area where the pine grows was probably open ground when the pine was planted, but over the years it has become forested. As most of you know, ponderosa pines and most other conifers don't compete for light very well with deciduous trees. The crowding from competing trees also keeps the pine from drying out as quickly, which makes conditions favorable to the fungal disease, Diplodia tip blight.

Now it was back to the east side of the river to update the circumference of the state champion walnut. The height and spread dimensions listed below are from 2021. Here are the measurements for the champion walnut:

Circ. 17.83', height 92.83', spread 100', index 329.83', rank #1

The champion walnut stands on the east side of McBride Hall, and not too far to the south stands the former champion American elm. This tree has taken a beating from storms but it remains as the second largest American Elm. The spread measurement is from 2021. Here are the dimensions of the elm:

Circ. 16.58', height 88.42', spread 86.75', index 309.108, rank #2 co-champ

Shane and I headed towards home with a couple of stops planned along the way. Someone had told me they were unable to locate the co-champion red oak in West Liberty. I confirmed the tree was still standing, but that was last fall, and it was very dark, so I couldn't determine the condition of the tree. The tree stands in Wapsi park, and it had suffered some storm damage, but I was pleased to see the tree was for the most part intact. We only updated the circumference. The height and spread dimensions listed are from 2019. Here are the dimensions of the West Liberty red oak:

Circ. 17.17', height 95.75', spread 86.5', index 321.375, rank #1 co-champ

The co-champion red oak from Dankwardt Park in Burlington has 320.335 points. These two co-champs are so close in size, they leapfrog each other for the top spot depending on which one has been measured most recently!

Our next stop was Sigourney. I was anxious to get some photographs of the champion American elm. The photos I took may not be great, but I would describe them as good. I'm never satisfied with my photos, but that is the price I pay for being a perfectionist. The trunk circumference was updated on April 27th of this year, and all of the dimensions were listed earlier in this report.

Our last stop for the day would be to see the champion cucumbertree near North English. The dimensions of the tree were updated on April 27th. The objective today was improved photographs. In my previous photos the tree was bare. It can be difficult to get good photos of big trees when they are foliated. If there are other trees close by, and there usually are, the branches that overlap make it difficult to visually separate the trees. The champion cucumbertree stands alone and that makes it a good subject for summer photos.

I was anticipating capturing the tree with low angle light from the sun. In reality, there was a line of clouds that kept the sun mostly obscured. I was able to get a few photos of the tree when the sun almost broke free from the clouds, but I wasn't able to get what I had envisioned. We had spent quite a bit of time striving for the great photo, but we finally decided to move on. Minutes after we had left, the sun was shining!

The following photographs include some of the trees mentioned in the above report:



Osage orange, Davis City, Circ. 13.21', Height 67', Spread 68.5', Index 242.625, Rank #1



Ponderosa pine, Jasper County, Circ. 9.17', Height 67.42', Spread 38.5', Index 187.045, Rank #3



Hackberry, Monroe, Circ. 14.83', Height 76.5', spread 88', index 276.5 rank # 2



A squirrel's eye view of the Monroe hackberry.



Blue spruce, Prairie City, Circ. 8', Height 84.75', Spread 27.5', Index 187.625, Rank #3, co-champion



Pin oak, Clarinda, Circ. 17.5', Height 89', Spread 104', Index 324, Rank #2, Co-champ

This recently measured co-champion pin oak from Clarinda is within 1.5 points of the number one tree.



At the top of the photo on the left you can see where a large limb was removed. Notice the wound on the left side of the trunk and at the base!



This pin oak is likely the largest tree on any of Iowa's 99 courthouse lawns.



Tamarack, Belle Plaine, Circ. 8.75', Height 55.08', Spread 59.75', Index 175.018, Rank #1
Co-champ



This photo shows some of the damage done to the new co-champion tamarack by the 2020 derecho.



Here is one of several hanging limbs in the Belle Plaine tamarack.



River Birch, Belle Plaine, Circ. 11.67', Height 69', Spread 98', Index 235.875, Rank #1



Red Oak, Laporte City, Circ. 17.25', Height 65.33', Spread 98', Index 296.893, Rank #6



Silver maple, Waterloo, Circ. 22.42', Height 94.67', Spread 94.33', Index 387.254, Rank #1 co-champ (if a single trunk)



Tom Schilke, president of the Prairie Rapids Audubon Society, stands next to the trunk of the Waterloo silver maple.



American elm, Albion, Circ. 17.42', Height 67.92', Spread 106.54', Index 303.555, Rank #3



Blackhaw, University of Iowa, Iowa City, Circ. 1.58', Height 24.75', Spread 22.5', Rank #1
Co-champ Andy Dahl stands next to the champion blackhaw. The dimensions listed are of the largest stem.

;



Cucumbertree, North English, Circ. 15', Height 64.92', Spread 76.75', Index 264.108, Rank #1



Shane Straka and I returned to photograph the champion cucumbertree in June.



American elm, Sigourney, Circ. 17.92', Height 70.92', Spread 127', Index 318.649, Rank #1
Co-champ



This is how the state champion American elm in Sigourney looked in June, 2024.



Red Oak, West Liberty, Circ. 17.17', Height 95.75', Spread 86.5', Index 323.375, Rank #1
Co-champ



Shane Straka stands next to the largest red oak which grows in West Liberty.



Here's a squirrel's eye view of the Iowa's largest red oak.