WORLD OF WOOD

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A DEDICATED GROUP OF WOOD COLLECTORS AND CRAFTERS

The World of Palms II

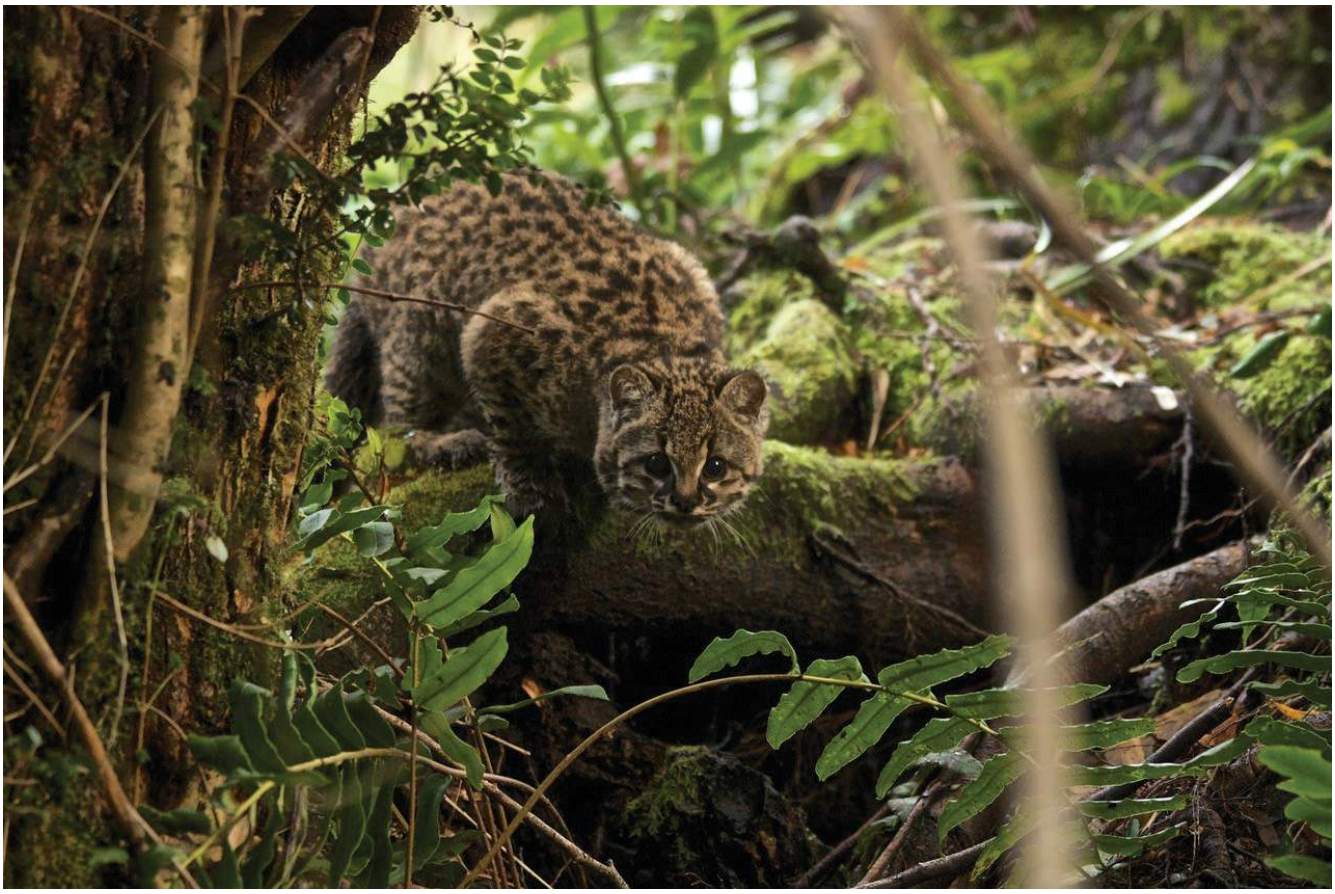
Chile: The Lake District

Wood Furniture in Mexico

July/August 2023
VOLUME 76, NUMBER 4
The Year of Rebound

Rare Animal of Chile, article about its habitat starts on page 19.

Kodkod aka Güiña (*Leopardus guigna*) is a small cat. Habitat: Southern beech forest and temperate rain forest. Chiloé Island, Chile. Classified as Vulnerable on the IUCN Red List. It has one of the smallest geographic ranges of any felid species and is restricted to dense forest areas. Photo by Fauna Australis, unaltered, (https://www.flickr.com/photos/123350223@N04/49829007091/in/photolist-pWigR9-2k6Vaq-duQmnF-2mBzZPE-Wme2sK-V87rtZ-VAixwY-VfPDQh-VDAxHX-VR5kQv-2iVdFMV-6vDC8B-XzEpAt-5R6Ra4-9eNB4b-pVZDsv-AZqsK-s4nMa8-npAAxg-8UscKE-7rnViL-AZqvV-AZr5T-2mxie5t-cT3KzS-7RoDCL-5R6RQF-5R6QBK-5R6S2z-5Rb7Nb-21HDLoE-5Rb7DE-V7dDRo-qduXAX-TW95jB/) Licensed under CC BY-NC-SA 2.0 (https://creativecommons.org/licenses/by-nc-sa/2.0/)



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On the cover: Alerce Milenario, the largest and oldest known *Fitzroya cupressoides* - Article starts on page 19.

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President
Mark Duff, Texas, USA
Phone: 210-601-4667
E-mail: markduff432@gmail.com

President Elect
John Lyons, Victoria, AUSTRALIA
Phone: +613 9899 0063,
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E-mail: swjoehlin@amplex.net

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E-mail: denwils21@gmail.com

Secretary/Treasurer
Patti Dickherber
12 August Alp Ct
St Charles MO 63303-5302, USA
Phone: 314-740-6593
E-mail: IWCSsecretary1947@gmail.com

Publications Chairman
Willem Hurkmans – Crete, Greece
Phone: +30 698 748 1593
PO BOX 20, GR73003 Kalyves, Chania, Greece
E-mail: weghurkmans@gmail.com

Endowment Fund Chairman
Daryle Layton, Idaho, USA
Phone: 208-362-2349,
E-mail: desertwood@layton-family.net

Archivist
Dennis Wilson, Alpena, Michigan, USA
Phone: 248-946-1980
E-mail: denwils21@gmail.com

Editor
Mihaly Czako, PhD (March 2013 - Present)
305 Century Dr. , Columbia, SC 29212-3612, USA
Phone: +1-803-237-5713
E-mail: mcperx5428+WoW.Editor@gmail.com

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Webmaster : **Art Lee**
E-mail: IWCSoffice1947@gmail.com

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Watermark: birdseye redwood, from the collection of David Flicker

President's Message

In June, when I got back from a service mission in Guatemala I was hoping to see some drought relief in the Texas Hill Country. Sorry to report that we were in the exceptional drought category just north of San Antonio at my "ranchito," despite a few minor showers.

Well, summer is upon us, and it is good to know that we are back on track with our timely *WoW* deliveries and the wood collecting season is coming alive. I plan to be in Colombia in a couple weeks in the Choco jungle getting some woodcraft samples to add to the collection. I have cut up some nice mesquite burls and boards to bring to the Talladega AGM. Later this summer I'll be in Colorado hoping to find some more bristlecone pine wood for the auctions.

While I have not called for a general formal BOD meeting at our AGM in Talladega (mainly because we are unlikely to have a quorum), I would like to hear from you all about how the organization is being run and any suggestions you may have. As COVID changed the way we conducted business over the past three years with the Zoom format, I will stand by for any suggested meeting topics and be ready to call a meeting when necessary. The By-Laws Committee is in the process of finalizing the updated by-laws and should be finished by the time you read this message.

Thanks in part to donations and proceeds from our Texas and Lake Yale meets, we are in relatively good financial shape. I do encourage our members to attend the Talladega AGM as there will be many opportunities to collect some great wood samples, craft items and lumber. This too will help our bottom line. Rick and Rhonda Long have been working very hard to come up with a fantastic event in Talladega. The venue will be one of the nicest we've had in many years. Please make this meet be one of your post-COVID destinations this year. I know that you will not regret it.

Mark Duff #6409

A Note to Contributors
Please submit articles as you complete them. They could be placed into future editions so each edition will present a balance of topics.

The World of Palms – Part II

By Raimund Aichbauer (RA) #10142, Willem Hurkmans (WH) #8761-L, Nelis Mourik (NM) #7460-HL & Frans Steenland (FS) #9338

A series of articles was started on palm trees, their growth and their very different, yet exciting stem material. In palms we may not speak of wood, because, by definition, wood (secondary xylem) is formed by a cambium ring, as in hardwoods and softwoods. Palm stems contain much xylem. For convenience, we may sometimes name the palm stem 'wood'.

Palm leaves were described in part I (*WoW* March/April 2023) and here are examples of entire (Fig. 6), bipinnate (Fig. 8), pinnate (Fig. 7,10), palmate leaves (Figs. 9&10), and the form intermediate between pinnate and palmate, the costapalmate leaves (Fig.12).

Fig. 6. Entire leaves of the trunkless Silver Joey Palm, *Johannesteijsmannia magnifica* J. Dransf. in Singapore Botanic Gardens, March 24, 2019 by RuB (Ruddy Bénézet), unaltered, https://commons.m.wikimedia.org/wiki/File:P1000996_%28Johannesteijsmannia_magnifica_%29_SBG.jpg, licensed under the Creative Commons Attribution-Share Alike 4.0 International license. https://creativecommons.org/licenses/by-sa/4.0/deed.en

Fig. 7. A feather palm with pinnate leaf. (WH)

Fig. 8. Bipinnate leaf of *Caryota no* Becc. (Giant Fishtail Palm) Fronds at Kula, Maui, Hawaii. April 03, 2012 by Forest and Kim Starr, unaltered, https://commons.wikimedia.org/wiki/File:Starr-120403-4144-Caryota_no-fronds-Kula-Maui_(25045239351).jpg, licensed under CC BY 3.0 us, https://creativecommons.org/licenses/by/3.0/us/deed.en

Fig. 9. Palmate leaf of a fan palm *Coccothrinax* sp. (RA)

Fig. 10. Palms with palmate leaves. The leaf segments all unfold at the end of the petiole, the sinus between the leaf segments is very short. *Licuala* sp. Photo: Raimund Aichbauer

Fig. 11. The red leaf sheaths (widened petiole) are typical for a number of species of the genus *Cyrtostachys*. Here we see *Cyrtostachys renda* Blume, the lipstick palm. (WH)

The inflorescence can originate at the base of leaves (axial) and in these species the entire plant does not die off once fruited. Palms can be monoecious (with bisexual flowers or flowers of both sexes on the same tree) or dioecious (male, staminate and female, pistillate flowers on separate trees). The fruit is a berry or a drupe, and is extremely variable in size between species.

According to the website *Plants of the World Online*, the palms (family Arecaceae, formerly also Palmae) comprise 180 accepted genera including 2,650 accepted species.

Fig. 12. Costapalmate leaves are blades of which at the end of the petiole the leaf is divided by the rachis along which the segments of the leaf begin. *Lodoicea maldivica* (J.F. Gmel.) Pers. Photo: Raimund Aichbauer

Six subfamilies exist; they are further divided into tribes and subtribes. Palms have existed for (at least) 110 million years (my) (Janssen & Bremer 2004, Onstein et al. 2018). Since those times (i.e., during the Cretaceous era) fossils aren't rare (Figs. 13-15, Back cover of March/April *WoW*). It appears that in the past, palms had a much larger distribution range, compared to their current range. This is explained (in part) by the climate being relatively warm in the Cretaceous and Paleogene eras.

Fig. 13. Unpolished pieces of petrified fossil palm stem material of unknown origin and age. All fossil palm stem material is called *Palmoxylon*. (NM)

For example, palms dating from the Eocene (about 50 my ago) are known from the seabed at the Lomonosov Ridge in the Arctic Ocean, and from Antarctica. It has been possible to link several fossil species to extant genera, for example *Sabal* Adans., a genus that existed 77 my ago in what is now Texas, USA. Fossil palm pollen as old as over 90 my old has been found.

Fig. 14. Petrified fossil palm stem material, showing roots attached to the stem base. (NM)

Fig. 15. Cretaceous fossil palm, origin Brazil Photo: Raimund Aichbauer

The way we view palms in a classical sense isn't always right. Species of *Calamus* L., known as rattans, are lianas. Baker & Couvreur, 2013, estimated that lianescent palms have been around for some 80 my. Before that, around 100 my, palms started to diversify – however some groups may have existed for 'only' 20 my.

Even if many species prefer warm, moist regions, there are some that prefer dry climates. It's interesting to note that Africa is relatively poor in species, while Madagascar is conspicuously rich in species. The current distribution does not match that of the past. Palms as a whole could be said to show a relict range; that also applies to several genera, e.g., *Nypa* Steck (sugar palm genus). The origin of the coconut palm, *Cocos nucifera* L., is a subject for much debate: the Angiosperm Phylogeny Group classification of flowering plants (APG IV) ends a paragraph on the origin and classification of palms with the phrase "*something is very wrong somewhere"*.

Some palms have underground stems from which the leaves rise above the ground. Most palms have 'aerial' stems, their height varying between 1" (2.5 cm) and nearly 200' (60 m) with diameters ranging from less than ½" (12 mm) to 6' (1.80 m). Stems can be solitary, multiple or (rarely) branching. The middle or lower stem can be dilated, due to storage of moisture as a reserve for periods of drought.

As far as their habit is concerned, palms can be split up into those with, and those without a crownshaft. This element is the point where the leaf base is shaped like a cylinder or mantle to protect the apical meristem. Usually, the parts bearing flowers and fruits originate from just below the crownshaft. Palms lacking a crownshaft show spirally arranged leaves up to their top, with the inflorescences in between of them; however, in both groups there are palms bearing the inflorescence at their top.

The leaves of some palm species include the largest leaves of all flowering plants. In the genus *Raphia* P. Beauv. the largest pinnate leaves can reach 80' (24 m) in length and 20' (6 m) in width. In *Corypha* L., the largest palmate leaves are found: 20' (6 m) across, with individual pinnae up to 10' (3 m) long. All the leaves originate in a spiral, forming at the top amidst the already extant leaves [this is true of all palms].

Anatomical details, according to Thomas & Boura, 2015, seem to be correlated to drought sensitivity. Palms where the vascular bundles show a pair of narrow vessels are conjectured to be more drought resistant than species showing just one, wider, vessel.

Although all recent palms have a very limited cold resistance in common, some species, e.g., *Trachycarpus fortunei* (Hook.) H.Wendl. can survive frost down to 14 F (-10 C). However, most species grow only there where the temperature never drops below 50 F (+10 C). The fact that the palm family, Arecaceae, includes by far the largest monocots and moreover shows relatively large fruits and seeds, has been explained by their distribution in warm climate zones. *Nypa fruticans* Wurmb is salt tolerant to some degree and can be an element in Mangrove vegetations. There are several species that are part of the mangrove forest such as *Calamus* L., *Copernicia* Mart. ex Endl., *Oncosperma* Blume to name a few.

In most palms, flowers are arranged in panicles that are inserted in between the leaves in the leaf axils all the way to the top or just below the crownshaft (Fig. 16&17).

Fig. 16. Stem with crown shaft. The leaf sheaths that form the crown shaft enclose and protect the growing tip and the youngest leaves, the rings on the trunk are leaf scars, the inflorescence arises under the last fallen leaf sheath of the crown shaft. *Hyophorbe lagenicaulis* (L.H.Bailey) H.E.Moore Photo: Raimund Aichbauer

However, some palms develop a terminal (in more than one sense) inflorescence. After fruit and seed production, the palm tree dies (in case of a solitary stem) or partially dies (just the stem that flowered, in multi stemmed specimens) (Fig. 18).

Fig. 17. A type of Creek Palms. The inflorescence arises directly below the crown shaft which moves further and further away from the inflorescence as it matures. *Hydriastele* sp. Photo: Arno Martin

Fig. 18. Dead stem with crown shaft. The crown shaft is formed by the leaf sheaths, flower principle just above the leaf scars, the space between the leaf scars is called an internode. Photo: Raimund Aichbauer

The Talipot Palm *Corypha umbraculifera* L. has the largest inflorescence of the entire Plant Kingdom. They can be as high as 33' (10 m) and 50' (15.2 m) in diameter, and consist of over one million separate flowers.

The variety in fruits in the Arecaceae is best described as 'gigantic'. The smallest are hardly to be recognized whereas *Lodoicea maldivica* (J.F.Gmel.) Pers. has the largest fruits of all seed plants, up to 20" (50 cm) long, 16" (~ 40 cm) wide and weighing up to 45 lbs (~20 kg).

Generally, the roots form a coherent mass that may be entirely underground or partially above ground. Some species sport rhizomes from which new stems can sprout. Other species developed pneumatophores or aerial roots, well known from plants in mangrove forests. Certain species have developed stilt roots, or props. Such palms give rise to roots ever a bit higher on the stem, where the base can slowly decay while the stem is supported by ever higher inserted stilts. Hence, the real stem would start ever higher above ground level during the course of the life of the plant (Fig. 19).

In many species, spines and fibres protect roots, stems and leaves that can be surrounded by a web of fibres; sometimes it's just the fruits that are protected thusly (Fig. 20,22, & 23). Lianescent palms belong with the longest terrestrial plants. Even if these liana palms rarely exceed about 4" - 5" (10 - 12.5 cm) in diameter they can attain extraordinary lengths, the longest making up to over 650' (200 m).

Fig. 19. Stilt roots of a number of palms arise higher and higher on the trunk, while the lower part of the trunk decays, over time causing the trunk to appear lifted higher and higher from the ground. *Iriartea deltoidea* Ruiz & Pav.
Photo: Raimund Aichbauer

Fig. 21. Young rattan palm meanders through the Tropenhaus in Frankfurt's Palmengarten *Calamus* sp.
Photo: Raimund Aichbauer

Fig. 20. Stem with spines and spirally arranged pinnate leaves with broad concave leaf segments. *Bactris* spp. Photo: Raimund Aichbauer

Fig. 22. Many species of the genus *Calamus* have spines on the leaf rachis that resemble claws. They are aids for climbing which, if broken, will re-grow in some species.
Photo: Arno Martin

Fig. 23. The trunk and leaf sheaths in this *Korthalsia* sp. are covered in spines, aiding this rattan to climb up. Photo: Arno Martin

Fig. 24. With this rattan, all parts of the plant are completely covered with spines, it is one of the rattan palms that grows more than 100 meters (330 feet) long. *Calamus sabut* (Becc.) W.J. Baker. Photo: Arno Martin

The group of lianescent palms, encompassing 535 species known as rattans are largely limited to Southeast Asia. They arose somewhere between Eocene and Miocene times, i.e., 50 - 20 my ago (Couvreur et al. 2015). In order to ascend trees and receive more sunlight, they use hook like protrusions from various organs to clamber up the stems of their hosts (Figs. 21-24).

The vessels in the vascular bundles of lianescent palms can have diameters up to ⅛" (4 mm) and can be as long as 13' (4 m). Scientists wonder how it is possible that vessels stay intact in plants that are 650' (200 m) long.
Continued on page 13

Fig. 25. If you take a close look at rattan palm fruits, you will see that they have a lot of resemblance to the appearance of a pinecone. *Calamus* sp. Photo: Arno Martin

Fig. 26. Fruits of a fishtail palm. The rachis of the inflorescence is completely lignified. *Caryota monostachy*a Becc. Photo: Arno Martin

Fig. 27. Fruits of a fan palm (*Licuala* sp.). The rachis of the inflorescence is also completely lignified here. Photo: Arno Martin

Fig. 28. Flowers and buds of a Singapore Walking-Stick-Palm. *Rhopaloblaste singaporensis* (Becc.) Benth. & Hook.f. Photo: Arno Martin

Fig. 29. *Chamaerops humilis* L., a clustering palm with immature fruit clusters. (WH)

Fig. 30. Bayas Palm, a multi-stemmed palm that can reach 20 meters (~ 66 feet) in height. *Oncosperma horridum* (Griff.) Scheff. Photo: Arno Martin

Fig. 31. Young specimen of *Bismarckia nobilis* Hildebrandt & H. Wendl. (WH)

Fig. 32. A potted specimen of *Butia capitata* (Mart.) Becc. with typical leaf remnants spiraling around the trunk. (WH)

Fig. 33. Multi-trunked Fishtail Palm. The trunks are covered with flowers and fruit clusters *Caryota mitis* Lour. Photo: Raimund Aichbauer

Fig. 34. *Copernicia alba* Mrorong. The leaf sheaths remain on the trunk. (WH)

Continued from page 11

The main difference between palms on one hand and hardwood and softwood trees on the other is the way they grow. Palms have no secondary growth in thickness. They grow from the meristem, found near the top of the palm tree, which is responsible for stem and leaf growth, and flower formation. At ground level or below there is a root meristem or root actuator system that causes the roots to grow. Hence, the structure of palm stem material is entirely different from that of dicots and conifers (for example, palm 'wood' has no rays).

Yet, growth in thickness in palms has been described. We cite from APG IV: "*Waterhouse and Quinn (1978) suggested that in some palms there was initially sustained primary growth, and this was followed by growth in which the trunk did not increase in width and was strictly columnar. Problems of vascular tissue in particular, but also other plant tissues, that involve age, are also mentioned elsewhere; in some respects, palms are similar to fossil tree lycopods, q.v., and the latter are also likely to have had a period of establishment growth.*"

Botânico & Angyalossy (2013) wrote: *"We found that a meristematic band occurs between the cortex and the central cylinder and gives rise to new vascular bundles and parenchyma internally, producing parenchyma and fibres externally. It appears secondarily, i.e., it undergoes meristematic activity in the median and basal stem regions, far away from the apical region. In fact, a meristematic band is present and may be more common than currently believed, but uneasy to detect in certain palms for being restricted to specific regions of their stems. In conclusion, the diffuse secondary thickening is here shown not to be the only mechanism of secondary growth in palms. The presence of a meristem band in the stems of palms merits careful reconsideration."*

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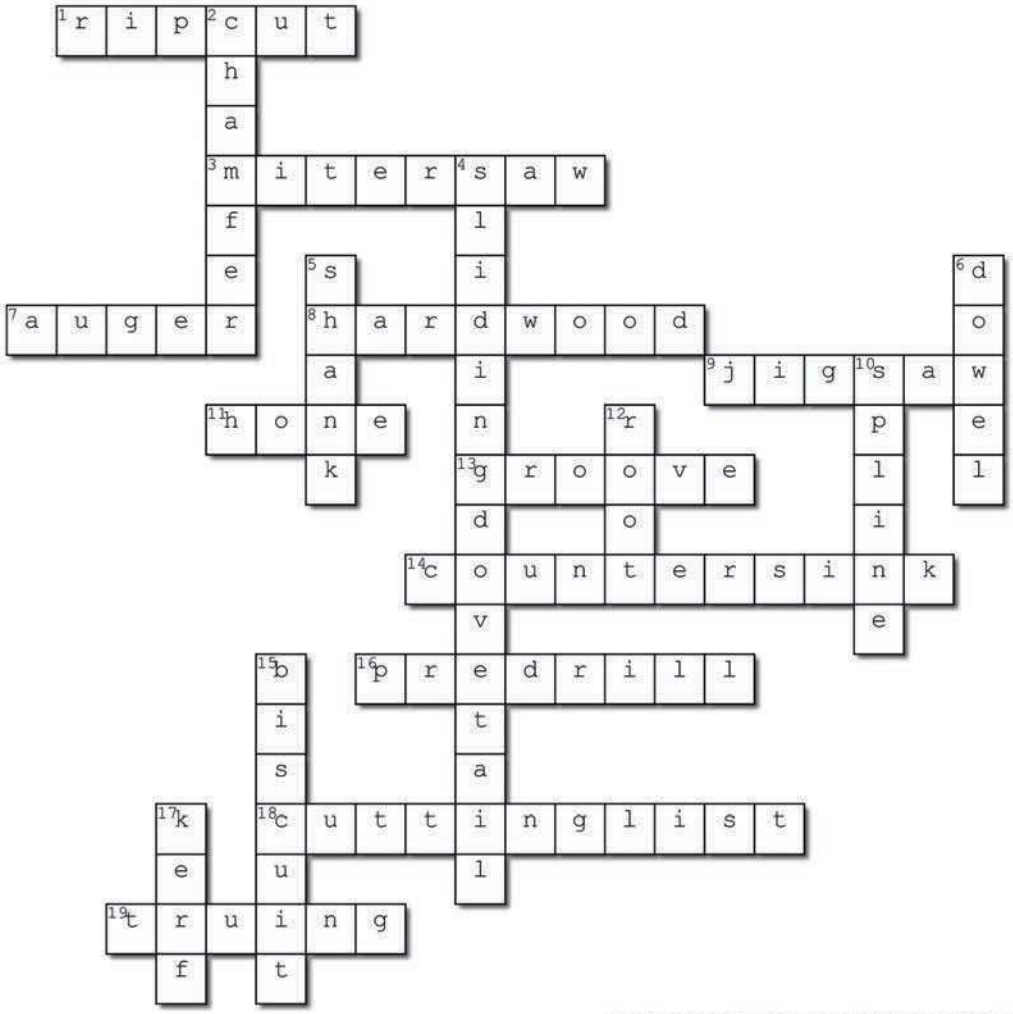
To be continued.

Fig. 35. Avenue of royal palms, *Roystonea* sp., in Puducherri (Pondicherry), India. (WH)

Solutions to the Crossword Puzzle in the May/June Issue

by Csilla Czako



Created using the Crossword Maker on TheTeachersCorner.net

Across

1. A cut parallel to the grain of a board. (**ripcut**)
3. A handsaw used with a miter box; a power saw, similar to a circular saw, that cuts miters. (**mitersaw**)
7. A wood-boring device or bit. (**auger**)
8. The wood from any number of flowering, fruit- or nut-bearing trees. (**hardwood**)
9. A power tool using a vertical, reciprocating, blade. (**jigsaw**)
11. To sharpen. (**hone**)
13. A 3 sided trench cut with the grain of the board. (**groove**)
14. To cut a cone-shaped recess in a pilot or clearance hole that allows a flat-head screw to seat flush or below the surface. (**countersink**)
16. To drill a hole before driving a nail. (**predrill**)
18. A comprehensive list of all the needed parts for a project. (**cuttinglist**)
19. The act of making true, as in square, flat, concentric or balanced. (**truing**)

Down

2. A beveled or grooved edge that is 45°. (**chamfer**)
4. This joint offers great strength and rigidity for box work, especially drawers and case pieces. (**slidingdovetail**)
5. The shaft of a bit or cutter that is gripped in a tool by a chuck or a collet. (**shank**)
6. A cylindrical length of wood used for making joints by inserting a length into two corresponding holes and gluing. (**dowel**)
10. A narrow strip of wood that is glued in corresponding grooves to join pieces of wood. (**spline**)
12. The portion of a screw length below the head that has threads on it. (**root**)
15. A small wafer of wood that is inserted and glued to an edge groove between two pieces of wood to be joined. (**biscuit**)
17. The wood removed by a saw blade between the piece you keep and your offcut.. (**kerf**)

Shrubwoods of the World

Blueberry

by Nelis Mourik #7460HL

This shrub is praised for its healthy fruits. The wood is much like all other woods in its botanical family.

The botanical name of Blueberry is *Vaccinium corymbosum* L. The genus *Vaccinium* comprises over 450 species and is native almost all over the Northern Hemisphere, as well as extending south into some countries of Andean South America, and Africa. *Vaccinium corymbosum* is native to E. Canada and C. and E. USA, south into Texas. A more distinctive common name is Highbush Blueberry. In North America, as well as elsewhere in the world, it is in cultivation in plantations for fruit production. It is one of the taller *Vaccinium* species, the tallest being *V. arboreum* (Farkleberry or Sparkleberry) in C. and SE USA. The genus *Vaccinium* is in the Ericaceae or heath family.

The genus name *Vaccinium* is the old Latin name of what is now most possibly *Vaccinium myrtillus* (European Blueberry or Bilberry), a small heather bush. The specific epithet *corymbosum* means 'provided with corymbs' (flowers and fruits).

Fig. 2. Small transverse section of a 1.5 cm (0.6 in.) wide stem of *Vaccinium corymbosum*. Wood grown on a plantation in Germany.

Blueberry is a deciduous shrub, generally 2 - 3 m (7 - 10 ft.) tall and wide, occasionally up to 5 m (16 ft.) tall. In plantations, however, it is kept smaller. The bark is reddish brown, very thin and flaky. It has dark, glossy green leaves, elliptical, 5 - 8 cm (2 - 3 in.) long, turning to a brilliant red, orange, yellow, and purple in autumn. The flowers are formed in clusters, long bell-shaped, white to a very light pink, to 8 - 9 mm (0.35 in.) long. The fruits are the well-known blueberries, dull dark blue, 6 - 13 mm (0.25 - 0.5 in.) across. In the wild the shrub is found in wooded or open areas with moist acidic soils.

Blueberry wood is off-white to very light brown. Although the wood colours darker towards the pith, heartwood is indistinct. The wood reaches about 10 cm (4 in.) across. Growth ring boundaries are distinct. The wood is diffuse-porous, with numerous, exclusively solitary, small pores, from 20 µm tangential vessel diameter down to smaller than 10 µm. Both simple and scalariform perforation plates occur. Axial parenchyma is absent or extremely rare. If present, it is apotracheal diffuse. Rays are of two distinct sizes. Uniseriate rays consist of square

Fig. 1. Longitudinal surface of a glued up *Vaccinium corymbosum* wood specimen. Wood grown in a plantation in the Netherlands

to upright cells only, multiseriate rays are 2 - 3 (- 4)-seriate, up to over 100 cells high, which is over 1.5 mm (1/16 in.). Multiseriate rays consist of procumbent cells with one to four rows of square to upright marginal cells.

Continued on page 18

Fig. 3. Lens view (8x) of *Vaccinium corymbosum* wood endgrain

Shrubwoods of the World

Blue Passionflower

by Nelis Mourik #7460HL

A popular, climbing outdoor and house plant, widely in cultivation, with a devoting inflorescence and name. The yellowish wood is brittle and often curved.

The botanical name of the Blue Passionflower is *Passiflora caerulea* L. The genus *Passiflora* includes 573 species (Plants of the World Online, Kew, April 2023), comprising lianas, shrubs, and trees up to 10 m (33 ft.) high. The genus is native to tropical and subtropical regions around the Pacific Ocean: the majority in North and South America, considerably less in SE Asia, in Eastern Australia and in Oceania. *Passiflora caerulea* is native to subtropical Argentina, Paraguay, Bolivia, and Brazil. It is one of the most popular passionflowers offered in horticulture. Other common names are Bluecrown Passion Flower, Common Passion Flower and - in non-Christian countries - Clock Flower.
The genus *Passiflora* is in the Passifloraceae family.

The genus name *Passiflora* literally means passion flower.

The common name was given originally by Spanish missionaries in South America in 1610 (Flor de la pasión and Espina de Cristo), because of its intricate flower structure which is seen as being full of Christian symbolism, each part representing a different part of the Passion of Christ. The specific epithet *caerulea* means 'dark blue.'

Fig. 1. Flower and leaves of *Passiflora caerulea*

Fig. 2. Longitudinal flat sawn surface of a glued up *Passiflora caerulea* wood specimen, the wood grown in Crete, Greece

Continued on page 18

Fig. 3. Transverse section of an almost 50 mm (2 in.) disc of *Passiflora caerulea* from near the base of the climber

Fig. 4. Lens view of *Passiflora caerulea* wood endgrain (8x). Wood from Crete, Greece; max. vessel diameter is 150 µm, wood more or less diffuse-porous.

Blue Passionflower

Continued from page 17

Blue Passionflower is a climbing plant, more or less evergreen. It is able to climb up to 5 - 10 m (≈15 - 30 ft.) high, provided sufficient support. Bark is brown on older stems, slightly furrowed, up to 3 mm (⅛ in.) thick. The leaves are palmate, 5 - 7-lobed, to 10 - 15 cm (4 - 6 in.) across, glossy green, the lobes oblong with rounded ends. Flowers grow from the leaf axils at the ends of the young shoots (Fig. 1). They are 7.5 - 10 cm (3 - 4 in.) across and consist of a 'bottom' of 5 sepals and 5 petals, almost alike, very light green, and a 'corona' of numerous purple-white-blue filaments, 5 greenish stamens, an ovary and 3 purplish pistils, towering on top of each other in the floral centre. In different varieties, the colours may differ. Fruits are orange-yellow berries, to 6 cm (2.4 in.) long and 4 cm (1.6 in.) across, containing many red seeds. Tendrils grow from the leaf axils to attach the shoots to their support.

Blue Passionflower wood is light yellow (Fig. 2). There is no distinguishable heartwood (Fig. 2-4). Near the base, stem width can reach about 5 cm (2 in.) (Fig. 3). More upwards stems are up to 2.5 cm (1 in.) across. The wood is semi-ring-porous to rather diffuse-porous.

Fig. 4. Lens view of *Passiflora caerulea* wood endgrain (8x). Wood from the Netherlands – south-facing wall; max. vessel diameter is 200 µm, wood more or less semi-ring-porous.

Growth rings are mainly distinct, determined by the presence or absence of small vessels in the latewood. Tangential vessel diameter is 20 - 200 µm, the smaller ones randomly divided over the growth ring, so not in the latewood only. Sometimes the very latewood is vesselless. Perforation plates are simple. Axial parenchyma is diffuse. Ray width is 1 - 8 (- 10) cells. Ray height is from very low up to 150 (- 200) cells, which is 6 (- 8) mm (0.24 – 0.32 in.). Rays consist of short procumbent, to square, to short upright cells, mixed throughout the ray. Prismatic crystals are present in the ray cells. Ground tissue consists of fibres with distinctly bordered pits on both radial and tangential walls.

The wood of Blue Passionflower is medium hard and medium heavy (specific gravity 600 kg/m³ or 37.5 lb/ft³, airdry). It is medium to fine textured and straight to irregularly grained; of course the grain follows the curvature of the branches. It must be dried soon after felling to avoid staining. The wood seasons easily with some risk of cracking, while too thin to cut it along the pith. The wood works well with all kinds of tools, although it is brittle and splinters when shortening. Because of the small dimensions and the curvature of the rounds, it is recommended to first sand two squared sides on a band sander. It glues well and sands easily. The wood is not durable. Both wood borers and fungi affect it.

The wood is too small and too inferior to be used. The climber is grown for its beautiful flowers, both as a potted plant and in the open ground along a support or a south-facing wall. The fruits are edible, but rather tasteless.

Originally in South America, and nowadays in homeopathy, several *Passiflora* species are known for their medicinal purposes (relaxing, against insomnia). *Passiflora caerulea* is the national flower of Paraguay.

Blueberry

Continued from page 16

Ground tissue consists of thin- to thick-walled fibres with distinctly bordered pits in both radial and tangential walls.

The wood of Blueberry is quite hard and quite heavy (specific gravity 750 kg/m³ or 47 lb/ft³, airdry). Texture is fine to very fine. Grain is straight to spiral, sometimes irregular. The wood had to be dried as rounds, resulting in twisting and spiral cracking in one piece and no problems in another. For quick drying, cutting off bark and sealing the ends is recommended. The dried wood works easily with all machinery, it glues well and can be sanded to a very smooth but dull surface. It is not durable and is easily affected by fungi as well as insects.

The wood of Blueberry is not used. In natural habitats, the berries are a food source for native and migrating birds, bears, and small mammals. Deer and rabbits browse the foliage. Before cultivation, the berries were already collected and used by native Americans and the first settlers. For over 100 years, already the species has been much cultivated for its healthy fruits, available in shops all year round nowadays.

Chile yes! Chile – Part II: The Lake District

by Réjean Drouin #3589

After visiting Chilean Patagonia we went to the Lake District (Los Lagos), also called the Switzerland of Chile. The Lake District is in the Valdivian laurel-leaved forest ecosystem, a temperate rainforest. This ecoregion occupies an area between Arauco (south of Concepción), the 37th parallel south and Chiloé Island (42nd to 43rd parallels south) and the Andean foothills between Toltén (north of Valdivia) and Palena (East of Chiloé Island). A temperate, rainy climate dominates. The trees reach impressive dimensions. The trees are mostly evergreen,

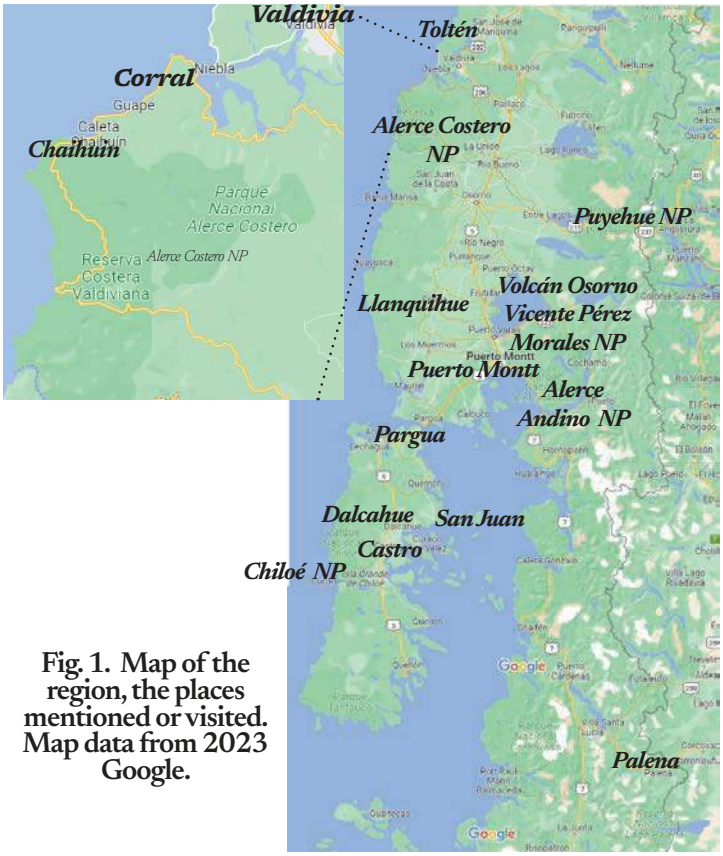


Fig. 1. Map of the region, the places mentioned or visited. Map data from 2023 Google.

with large, brilliant, dark green leaves. There is a very high biodiversity in correlation with the heavy rainfall (more than 2,500 mm, ~ 1,000 inches) and temperate temperatures.

Alerce (Lañilawal, Patagonian Cypress, *Fitzroya cupressoides*, Cupressaceae) is an evergreen conifer in these forests. This species has been exploited intensively between the 17th and 20th centuries due to its abundance, durability, and because it is easy to work. It was suitable for all construction purposes. Immigrants from Europe soon used the trees in dwellings (e.g., as shingles). At the same time the settlers cleared large areas for pasture and rearing cattle. Consolidation of colonization and industrialization of Valdivia caused different uses of Alerce wood for footwear, barrels for aging beer, and large shipyards.

In 1910, the start-up of the first steel mill in South America was added. The company had nearly 80,000 hectares (~ 192,000 acres) of land that extended along the Coastal Cordillera to the Chaihuin and Futa Rivers. The company's operation for the smelting of iron based on firewood and coal meant an exploitation of such magnitude that it ended up causing deforestation of Corral (a sea port in Valdivia Province) and its surroundings. This latter would bring supply problems for the same plant that ended up closing in 1958. The plant was destroyed by the great earthquake and tsunami of May 22, 1960.

In the same way as in colonial times, the export of native wood continued to be important. Between 1948 and 1949 about 42 million board feet of native forest wood were destined for export alone, of which 333,300 bd ft were Alerce wood. The main destinations for these woods were Argentina and England. By the mid-1960s, the province of Valdivia was the one with the largest number of sawmills in the entire country, 15 in Valdivia city alone.

By then, at least three large logging companies had already carried out intensive exploitation in the area. The oldest sawmill, Vergara Cotapos, settled in Chaihuin in 1843 and owned a total of 25,700 ha (~ 62,000 acres) of Alerce in 1956, comparable to the total area of the Alerce Costero National Park. The Alerce exploiters later joined the Ralco Lumber Company and Bosques de Industria Maderera to extract Alerce from the Coastal Cordillera to be used as poles, including those for power lines.

Devastating facts of history compelled me to visit most of the national parks of this area. We arrived at Puerto Montt in the Lake District. We took a rental car and followed the east road to see the huge active Volcán Osorno. Unfortunately, we could only see part of it because of fog, clouds, and limited time. Going east, we made a round trip of Llanquihue Lake to Osorno where we lodged for three nights.

The following day we drove to visit Puyehue National Park. This park is surrounded by volcanos (Puyehue, Casa Blanca, and Osorno) and is representing Valdivian wet temperate forests. It is a very diverse forest with the most impressive representative being Coigüe (*Nothofagus dombeyi*, Nothofagaceae), which can get over 45 meters (~150 feet) tall (Fig. 2). Other species encountered were Ulmo (*Eucryphia cordifolia*, Eucryphiaceae), which was in blossom, Olivillo (*Aextoxicon punctatum*), an endemic and sole species of the Aextoxicaceae family, Tineo (*Weinmannia trichosperma*, Cunoniaceae), and Manio Macho (*Podocarpus nubigenus*, Podocarpaceae, Fig. 3). Higher altitude species are Tepa (*Laureliopsis philippiana*, Monimiaceae), Manio (*Saxegothaea conspicua*, Podocarpaceae, Figs. 4&5), the endemic Guaitecas Cypress (*Pilgerodendron uviferum*, Cupressaceae), and just below the tree line, Coigüe de Magallanes (*Nothofagus betuloides*), Lenga (*N. pumilio*), and Ñirre (*N. antarctica*).

The next day we visited the Alerce Costero National Monument. Fortunately, the day was completely without clouds, which is very rare according to the ranger. Since the

Fig. 2. Silvie with Coigüe (*Nothofagus dombeyi*)

reserve is large, we did just one hike to see the Alerce Milenario (the Front Cover). The Alerce Milenario(on the front cover) is the largest tree of the nature reserve.

While it has been on the list of oldest trees, this Alerce tree (*Fitzroya cupressoides*) is now rivalling others to be possibly the oldest tree in the world. In 2020, Jonathan Barichivich and Antonio Lara of the Austral University of Chile, used an increment borer, driving it as far as possible without damaging the Alerce Milenario tree. The partial plug thus obtained, showed approximately 2,400 tightly spaced growth rings. They then used statistical modeling based on data from 2,400 other trees and Barichivich extrapolated and arrived at an age estimate of 5,484 years. It is certain that the tree is at least 5,000 years old. The findings suggest that the tree is older than the current record-holder, The Methuselah Tree, a 4,853-year-old Bristlecone Pine in the White Mountains of California, USA. The trunk is more than four meters across (> 13 feet) and much of the crown fell away, so part of the trunk died. Alerce Milenario tree is covered with lichens and mosses. Barichivich said "Only 28 percent of the tree is actually alive, most of which is in the roots, so when people walk across the nearby soil, they're actively damaging the last remaining living parts of the tree". As of May 3, 2023, this research is not yet published in a peer-reviewed journal, and is not corroborated.

The following day we were supposed to visit the Alerce Andino National Park, but the road conditions prevented that, and we went instead to the Vicente Pérez Morales National Park, the most ancient national park of Chile. Most of the forests in the park correspond to the evergreen type, with a wide range of environments. In flat and poorly drained places humid galleries are composed mainly of Arrayan (*Luma apiculata*), Canelo (*Drimys winteri*, Winteraceae); Coigüe (*Nothofagus dombeyi*), Patagua (*Crinodendron patagua*, Elaeaocarpaceae), Pitra (*Myrceugenia exsucca*, Myrtaceae). Alerce (*Fitzroya cupressoides*) is also present on steep slopes and moist habitats). We saw Olivillo (*Aextoxicon punctatum*), and Ulmo (*Eucryphia cordifolia*) also. Above 500 meters (~ 1,650 feet) there were also *Laureliopsis philippiana*, Trevo (*Dasyphyllum diacanthoides,* Asteraceae), and *Weinmannia trichosperma*. The most interesting species during our visit was the Arrayan, Chilean Myrtle (*Luma apiculata*).

Arrayan is in the Myrtle family, native of the central Andes between Chile and Argentina, from 33° to 45° parallels south. Growing to 10–15 m (33–49 ft) tall and wide, it is a vigorous, bushy, evergreen tree with fragrant flowers (Fig. 6).

Fig. 3. Réjean with Manio Macho (*Podocarpus nubigenus*)

Fig. 4. Manio Hembra (*Saxegothaea conspicua*) Photo by Claude Thiffault

The following day, we visited Chiloé Island after a night in Puerto Montt. We took the ferry boat at Pargua village, 60 km (~ 37 mi) SW from Puerto Montt, which crosses the Chacao Channel to Chiloé Island in one and a half hours.

We stopped in Castro, the capital of the island. We were expecting to go to the Parque Nacional de Chiloé the day after, but the temperature and the road conditions were not on our side, so we decided to visit more in Castro and to make a road trip to visit colonial wood churches.

Fig. 5. *Saxegothaea conspicua* (Manio Hembra) Photo by Claude Thiffault

Fig. 6. Arrayan, Chilean Myrtle (*Luma apiculata*). Its trunk appears twisted and contorted and has a smooth bark which is colored grey to bright orange brown. The bark which peels as the tree grows – giving a two-tone appearance of rich cinnamon color, contrasted with cream.

Chiloé Island is mostly agricultural. It is located in the Valdivia temperate wet forest zone. However, it is outrageously deforested except the Chiloé National Park. This park protects the following tree species: Tepa, Olivillo, Coigüe, Luma, Pitra, Arrayan, Alerce, and Ciprés de las Guaitecas.

Our interest on Chiloé island was the visit of Castro. This colonial town is a perfect example of the use of Alerce as shingles ('tarjetas' in Spanish). I probably took pictures (Fig. 7) of more than 20 kinds of those shingles on different roofs of houses. The Castro church is a marvelous example of the use of wood. The church is huge and completely made of wood inside as well as outside (Fig. 8). We visited a Museum of the colonial wood churches where one can see models (Fig. 9) and sketches (Fig.10) of all the wood churches of the island. There is also a wood sample kit (Fig. 11) showing the different wood species used in the building of those churches.

We also went to see the famous "palafitos". The palafitos are built on stilts in the water, usually in quiet areas such as canals,

Fig. 7. Example of wooden shingles on a house in Castro

lakes or lagoons (Fig. 12). The construction of these overwater bungalows and structures in Chiloé originated during the 19th century when the whole area underwent a great commercial expansion, especially in the fishing industry, which allowed fishermen to live by the water and moor their boats next to their homes. In addition, since it was public land, the fishermen could settle there, practically free of charge (although this currently causes major problems with home ownership).

In the past, there was a large number of stilt houses scattered around the island of Chiloé, but due to earthquakes and tsunamis many have disappeared. Currently, many of the palafitos are still inhabited by the islanders, who make their

Fig. 9. Colonial church models

Fig. 8. San Francisco church, on the Plaza de Armas in Castro, the main Catholic temple in the capital of the Province of Chiloé. In the structures, wood from the area was used, such as Alerce, Coigüe, and Guaitecas Cyress. The interiors are made of Rauli (imported from the mainland) and Olivillo. The roof, front, and external linings are made of galvanized iron sheets.

daily boat trips to catch fish. Some palafitos were converted for tourism, so there are palafitos that are cafes, restaurants or hotels where you can sleep. Roof shingles are made of Alerce wood. The house has two well-defined fronts, one towards the canal where there is a beautiful terrace, and the other towards the street with a connecting bridge.

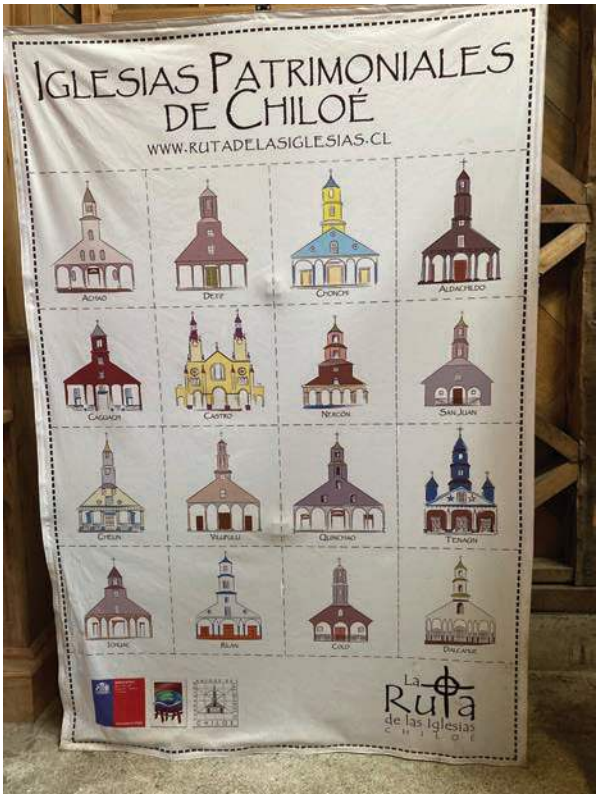


Fig. 10. A cloth illustrating colonial churches

Fig. 11. Samples of wood used on Chiloé Island for artefacts

The houses that were built on the pillars are colorful. They are perched on stilts mostly made from local Luma (*Amomyrtus luma*, Myrtaceae) since it does not rot easily. Its wood is also used to make tool handles. In other times, it was also used to make blunt weapons such as the wooden cane used by the Chilean police officers, which was popularly called "luma".

Luma leaves are simple, lanceolate in shape. It produces white and fragrant flowers, of honey importance. Its fruit is an edible black or purple berry. It is a slow growing tree that can reach 30 feet (~10 m) in height. The trunk is thin and straight, and its wood is very hard and difficult to work. The edible fruit, called Cauchagüe, Cauchao or simply Luma, is used to make jams, and also to make a chicha [a strong alcoholic beverage].

Fig. 12. Palafitos, structures on stilts, in Castro

In Chiloé we enjoyed a memorable dinner with the traditional "curanto" dish, so huge that it was impossible to eat it all. Curanto is a traditional Chilote method of food preparation using heated rocks buried in an earth oven that is covered with Pangue (Chilean Rhubarb, *Gunnera tinctoria*) leaves and mud. The fundamental ingredients are seafood, potatoes, along with other traditional preparations from Chiloé Archipelago such as milcao (potato pancake) and chapalele (Chilean dumpling of potato and wheat flour), to which are added meats and sausages, or more things (Fig. 13).

Fig. 13. Famous curanto plate of Chiloé Island

The road trip followed the eastern road from Dalcahue to Linao. We stopped at five local churches. In Dalcahue, I found a wood artisan who used local woods. I saw a beautiful bowl made of Alerce root (see photo on the back cover), and also from Ciprés and Olivillo. A cut Luma stilt showed us the quality of this wood (Fig. 14).

In San Juan, I learned that Alerce wood is no longer used in restoring colonial churches. Tinted Lenga is actually used as a substitute (Fig. 15).

Fig. 14. Luma slice (*Amomyrtus luma*, Myrtaceae)

Fig. 15. Renovation of a church in San Juan with tinted Lenga as a substitute for Alerce

Before speaking of La Serena and the next part of our trip, I have to mention that we did not go to the part of this ecoregion with Andean temperate deciduous forest ecosystem types (bosque templado caducifolio andino), located north of Valdivia near Talca to the foothills of Andes Cordillera from Rancagua in the north to Villarica in the south (https://simbio.mma.gob.cl/Ecosistemas/Details/64). This is the only temperate deciduous forest in South America, and is home to some rare species such as the Chilean Palm (*Jubaea chilensis*) (up to 50 meters, ~ 165 feet tall), *Araucaria araucana* (up to 50 meters), *Nothofagus alpina* (Rauli), *N. obliqua* (Roble Chileno), *N. dombeyi* (Coigüe), and others. This ecosystem has been very disturbed and the area heavily deforested after a government program replaced indigenous forests by plantations of Radiata Pine and *Eucalyptus* to fulfill modern paper industry needs.

This area suffered from forest fires like those in 2017 and during all of February 2023, that affected those plantations and neighboring areas. The fires began around the end of January 2023 and have affected, as of February 22, at least 440,000 hectares (~1,056,000 acres) of land. The most affected regions are those of Biobío, Ñuble, and Araucanía. The Chilean authorities counted more than 300 different outbreaks of fire and 25 deaths, more than 3,000 injured, thousands of displaced persons, and 1,150 homes destroyed.

To be continued.

A Visit to a Wood Furniture Store in Mexico

by Stan Joehlin #3233L

On a recent trip to Tijuana, Baja California, Mexico, just south of San Diego, we stopped in to visit a great-nephew and were instant admirers of a large natural edge table in his living room (Photo 1).

Photo 1. View of the top of a large natural edge table made of Elephant Ear. Sharon Joehlin admiring the table.

It was made from a horizontal cross section cut across a huge stump with the main accent points being the heartwood of two one foot (~ 30 cm) diameter limbs about three feet (~ 90 cm) apart. The wild grain between the two centers was beautiful as shown in photos 2 and 3.

The local common name for the tree is Parota, Elephant-Ear Tree, and the scientific name is *Enterolobium cyclocarpum*. Even the support pedestals are made of the same wood (Photo 4).

Photo 2. Nice grain

Photo 3. The wood dried so well that it did not check.

Photo 4. Even the support pedestals were made of the same wood.

The table was made by Baja Parota Design of Rosarito, B. C., Mexico. They take great pride in their work as shown by the prominent display of their logo (Photo 5).

Photo 5. The logo of Baja Parota Design.

We were able to visit the shop as Rosarito is a short drive from Tijuana. They specialize in making custom furniture from these large slabs. They only use slabs they salvage from fallen or dying trees, and never harvest living trees for the slab supply. The owner did comment that the large slabs are becoming harder and harder to find.

They have a large display room with many finished pieces ready to ship and others in various stages of construction.

Like many of us they also have a lot of wood they haven't got around to using yet as shown by their supply yard. If you are ever in the San Diego, Tijuana area, it is well worth the short drive to visit the Baja Parota Design facility in Rosarito.

Photo 6. Finished piece in the display room.

Photo 7. Finished table in the display room.

Photo 8. Finished table in the display room.

Fig. 9. Baja Parota Design has a lot wood in their supply yard.

My thanks to Peter Freidman, Photographer for help in improving the quality of the images.

Reply to the article, *All My Relatives Are Miocene Fossils* [Courtesy Hollis Marriott]

by Willem Hurkmans #8761-L

More specifically, this is intended as a reply to some 'interesting questions' put on page 3 of this article [i.e., p. 16 of *WOW* 75-4]. During our [Maarten van Vliet, Margriet Van Deelen, Henk Groen and the undersigned] student days, we were a closely knit band of students, well guided by a man whom we considered to be our hero at that time [and I still entertain this consideration], Professor dr. F.P. (Frits) Jonker at Utrecht University, Netherlands. Just the four of us followed the *Biology & Geology [B5]* curriculum. We were constantly challenged with questions and arguments – in order to be trained as scientists who leave no position unquestioned, no paradigm unchallenged, no stone unturned.

Jonker, himself a palaeobotanist, knew a geologist, Paul Y. Sondaar, who had developed interesting ideas about the mechanisms used by [in his case] animals travelling from the mainland to islands [lit. 1]. He referred our bunch of curious students to Sondaar and to his colleague Matthias Freudenthal; and Maarten and I did fieldwork in the Mediterranean, to southern Italy and to Crete, [under the guidance of Freudenthal and Sondaar] studying these problems.

In those days, fossil plants were mainly studied by biologists while fossil animals were mostly studied by geologists; I don't know why and in other countries it may have been different. And I am also still under the impression that there is not a very intense communication between zoologists and botanists, where phytogeoraphy and zoogeography are concerned. Please correct me if I'm wrong, my notions may be outdated...

It appeared at that time that two "distribution theories" [at least] would stand up to the [contemporary] criticism. The first one is that especially smaller animals, such as rodents, get around on floating debris, like tree trunks, hence they can travel far, provided they don't die from hunger in the course of doing so. If on a tree, they could 'eat their means of transport' until they 'got somewhere'. The second theory uses the assumption that many animals can actively swim – this of course would be a much larger sized class of animals – like Proboscidea [elephants and their congeners] or larger grazers, like Cervids [deer etc.].

Please note that predators and Insectivores [for lack of prey] and reptiles [for lack of means to maintain a good body temperature] are generally barred from these distribution mechanisms. Of course there is the Saltwater Crocodile (*Crocodylus porosus*) but in their case, it's the large sized specimens that are able to make a 'safe crossing' – not just because of size, but also because of favourable sea water temperature, given their tropical habitat. But the 'Saltie' is many times the size of 'your average traveller' so it very likely is hardly representative.

More theories have been developed; lit. 1 provides many data, however they pertain mainly to animals. Lit. 3 [and extensive other literature by the same author] examines plant distribution and its cause, taking my home island of Crete, Greece, as an example. In lit.4, the notions about isolation are further refined with geological and historical aspects [highly recommended, monumental work with distribution maps for about 4,500 vascular plants of the Alpine region].

I wholeheartedly agree to the original author's idea that 'informed speculation is fun' and would like to invite others to contribute to this discussion, because this is the way that we can make advances in science! Now I'd like to make a point that already during the 1950s several botanists, eg C.G.G.J Van Steenis and A.J.G.H. Kostermans, had already developed quite well wrought ideas about the insulation afforded by mountain chains; in some cases every mountain chain has its own micro-endemics. I had the same experience, much later [during the 1990s] to some degree during my entomological work in Turkey. Both phtytogeography and zoogeography are sciences to be taken very seriously.

Those who take the trouble to study the articles by entomologists Wolfgang Schacht, Rüstem Hayat and Klaus Warncke [all working in eastern Turkey] will be persuaded that isolated, high mountain chains can be the cause of intense speciation. In other parts of the world, the situation will be similar without a doubt. Altitude, in my view, can be as effective a means of species formation as island hopping is. And indeed, if only as a tool for intellectual challenge, possibilities are rarely exhausted soon...

Finally the monumental work by Gerhard Pils should not be overlooked [lit.2]. His data illustrate the sometimes very restricted distribution of plants that exist in much isolated areas. One explanation is that when areas in the northern hemisphere warmed

after the ice ages, species withdrew to the cooler mountain areas where they persisted in isolation and developed into different [micro]species. However, such isolation may also occur without the reasons being obvious: when the Wollemi Pine was discovered in Australia, the area where it occurred was not very different from some neighbouring precincts. Of course, with islands and isolated mountain chains it's easier to explain why species can persist there.

Lit. 1. A. van der Geer, G. Lyras, J. De Vos & M.Dermitzakis, 2010: *Evolution of island mammals: adaptation and extinction of placeental mammals on islands*. John Wiley & Sons.
Lit. 2 Pils, Gerhard, 2006. *Flowers of Turkey, a photo guide*. Eigenverlag G. Pils, Linz [Austria]
Lit. 3. W. Greuter, 1971: *Betrachtungen zur Pflanzengeographie der Südägäis*. Opera Botanica 30: 49-64.
Lit. 4. D. Aeschimann, K. Lauber, D. M. Moser & J-P. Theurillat, 2004. *Flora Alpina, Ein Atlas, &c.* Haupt Verlag, Bern/Stuttgart/Wien

WOOD MEETS

IWCS, AUSTRALASIAN MEETING – HAHNDORF SA
Monday 16th to Friday 20th October 2023

Conference registration fee A$ 495 per person. Please note – Registration Fee does not include breakfasts. It also does not include dinners on Wednesday and Thursday nights, as these will be in hotels in the main street of Hahndorf and are A La Carte. Please advise of any special dietary needs.

Make cheque, money order or bank draft payable to:
International Wood Collectors Society
Direct debit NAB BSB 084-447 A/c 52615-4012, Quote Surname and IWCS No.
International Direct debit NAB Swift Code NATAAU3303M BSB 084-447
A/c 52615-4012 Quote Surname and IWCS No. Include transfer fees.
Forward or Email this registration form to:
Allan Plunkett, 12 Ormsby Ave, Parafield Gardens, SA, 5107
Email ros.allan@bigpond.com Mobile 0428 258 599

A detailed program will be available as soon as all arrangements are confirmed (including details of guest speakers and topics)

IWCS ANNUAL MEETING
September 25-29 (Monday thru Friday)
SHOCCO SPRINGS Baptist Conference Center
Talladega, Alabama, USA

Host and Program: Rick & Rhonda Long +1-812-327-9565
Registration: Rick & Rhonda Long rrlong1994@gmail.com

We have three volunteers to do craft classes. We have a Sawmill available to us. We have a speaker from the Talladega National Forest.

For other activities we have the Sylacauga marble company, one of the largest in the world. They have a library to tour and an observation deck to visit. We also have the Blue Bell Creameries where you can view the making of the ice cream. You can even get two scoops of ice cream of your choosing for only US$ 1.00.

The town of Talladega has several buildings on the National Historic Register. There is the Comer Museum and Art Center - FREE admission. Grist mill, Covered Bridge, and Caverns. Woodcrafters are close by.
ANY VOLUNTEERS PLEASE CONTACT RICK LONG
812-327-9565, rrlong1994@gmail.com

IWCS 2024 Southeast Regional Winter Woodfest
February 12-16 ((Monday thru Friday)
LAKE YALE Baptist Conference Center
EUSTIS, Florida, USA

Host and Program: Rick & Rhonda Long +1-812-327-9565
Registration: Rick & Rhonda Long rrlong1994@gmail.com

In 2024, it will be held at the Raintree Facility

Members' Listings and Requests

Members with wood specimens and books for sale

I am interested in expanding my wood collection as funds permit. I collect in the form of transverse slices, commonly known as "tree cookies". I am interested in all woody tree and shrub species, even those not considered commercially valuable. I am looking for slices green or dry about 10-12" (~25 x 30 cm) in diameter, or whatever is representative of that species.
Eli Jensen #10010
Phone: (928) 606 0373
Email: elijensen@ironwoodforestry.com

I am interested in doing some swaps. I have 2,200 specimens 60 x 6 x 90 mm of all sorts of imported and home-grown woody plants.
Lionel Daniels #6509
Windy Heights High Cross, Froxfield, Petersfield, GU32 1EK UK
Phone: 01730 827472
Email: lioneldaniels1@outlook.com

1000-plus different kinds of wood specimens precisely crafted and labeled, most identified from trees in the forest. I have woods from the USA, Mexico, Brazil, Japan, Australia, and others. Contact me for a list.
Alan B. Curtis #1132HL
2370 Douglas Drive,
Eugene, Oregon 97405, USA
Email: abcwoods1@gmail.com

I provide wood specimens from around the globe, accurately dimensioned, nicely sanded and labeled. I maintain a mailing list and send notification when new specimens become available. Contact me for a list.
Gary Green #6654L
9923 N 800 E, Syracuse, IN 46567
Email: ggreen3@earthlink.net
www.woodsbygwgreen.com

I have a good range of more than 400 *species of Australian rainforest and outback woods in specimen size or as egg blanks. I will also cut to your requirements*
Colin Martin #7189
Dorothea Crt, Harristown, Queensland 4350, Australia; Phone: (061) 4635 3697
Email: colinrmartin5@gmail.com

For sale: More Useful Woods of the World $7.00 + postage of $4.00 USA shipments, and A Man of the Woods (Richard Crow biography) $7.00 + postage of $4.00. Both are a total of $14.00 plus postage of $5.50 USA shipments.
Dennis Wilson #2324L
1545 Fitzgerald Ln., Alpena, MI 49707-8862, Email: denwils21@gmail.com

Over 1,000 different wood specimens from around the world. Over one-third are specially figured like blistered, curly, fiddle back,quilted, birds eye, mottled, burled and over 200 species from Vietnam.
Réjean Drouin #3589
333, 19 e rue, Québec, Québec, Canada G1L 2A5 Phone : (418) 529-5466
Email: fusionstorm@hotmail.com

I have two or more specimens of more than 700 to 800 different woods from around the world in my stock. I would like to exchange or sell. They are standard or other sizes. Contact me for my list.
Dieter Becker #6362
43, Engersgau str., Neuwied, 56566, Germany
dieter.becker.iwcs@t-online.de

I have over 1,000 different specimens of wood from around the world for sale or trade. I have some larger pieces of woods for collections of crafts from different wood species. Please send me your list for trade. Contact me for my latest list.
Dennis Wilson #2324L
1545 Fitzgerald Ln.
Alpena, MI 9707-8862
Email: denwils21@gmail.com

I'm interested in doing trades and expanding my current collection. I have a couple hundred standard-sized duplicates from around the world. Email me for a list or view it online.
Eric Meier #9701
4850 Merilee Dr., Minnetonka, MN 55343; Email: eric@wood-database.com
www.wood-database.com/trade/

I have surplus specimens that I would love to trade for specimens not yet on my list. Email me with your list and I'll send you mine and maybe we can swap some.
Herm Stolte #5796
2816 Grant Crescent SW, Calgary, AB, Canada, Email: hgstolte@telus.net

I grow trees on my farm and own a small sawmill. I'm really looking for regular users of wood, rainforest species, especially Australian Red Cedar and others, Hoop Pine and a few Eucalyptus, but I can also supply some unusual species to wood collectors. Many of these trees I have planted my self.
Bob Whitworth #10085
Qld. Australia.
www.treeplanter.com.au
Email: forest@spiderweb.com.au

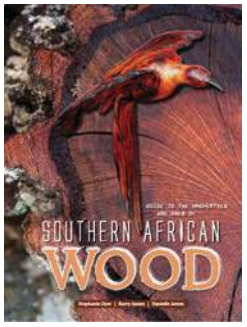
I sell books on wood; Hardwoods of Australia, Pines of Australia, What Wood is That?, World Timbers, etc. I sell used woodworking tools and rare and exotic native timbers. Please email me. Please don't phone.
Graeme Briton #9149
Launceston, Tasmania,
Email: graemebriton@gmail.com

I started recently to collect wood and I´m interested in expanding my collection. Contact me for exchanges or sale.
Francisco Rodrigues #10166
Rua das Casas Novas 104
4590-764 Ferreira, Portugal
phone: +351 931113710
Email:
francisco.rodrigues@folhasclassicas.pt

XYLOS provides standard size specimens from woods collected by IWCS members Willem Hurkmans, Henk Bakker and Nelis Mourik. Our list will be regularly updated and consists of many exceptional species for the serious collector. For our story and specimens list see the November/December 2020 WoW, or contact us. Xylos intend to submit a list of additional species available.
To avoid repetition, a complete list including everything issued and still in stock, will be available on request.
Henk Bakker #6966
Zuiddijk 387
1505 HB Zaandam
Netherlands
Email: hlbakker@12move.nl.

Wood for sale: California nutmeg. Very rare: 4/4 to 5/4 x 12" to 16" to 8' long; $12.50/bd ft.
Dave Mouat #7101
Email: dave.mouat@dri.edu

Now available, Southern African Wood (ISBN 781920217587, Briza Publications, Pretoria, RSA), authored by former IWCS members Stephanie Dyer (#9380), Danielle James and Barry James (#9381). It is a fully illustrated guide to the properties and uses of wood from 140 Southern African tree species. A handful of leather-bound collectors editions remain for $140.00 US dollars plus shipping and handling, and the standard hard cover books are $46.60 US dollars plus shipping and handling. These are discounted 20% for IWCS members. Non-members will be charged $168.50 +S&H for the collectors edition and $57.57 + S&H



for the standard. Each copy will be signed by the authors. All copies will be shipped from Pennsylvania, USA. Reserve your copy today by contacting
Mark R. Peet #9804L
Email: markrpeet@hotmail.com

Members' Listings and Requests

Members with wood specimens and books for sale

I offer about 200 samples coming from Cameroon mainly from botanical exploration and identification. Email me for a trading list.
Joey Montagut #10258
25 rue du 24 février
11000 Carcassonne, France
Email: joey.montagut@yahoo.fr

I have two sets of Woods of the World Samples I would like to sell, not sure the best way to list them.
They were produced in the 1960s by Family Craft Shop Libertyville, IL.
One set of 76 samples has few if any duplicates. One set of 86 samples has many duplicates. I'd like to sell the sets for US$150.00 each. Can be seen and picked up at my store.
Ken Burtch #3382
The Hardwood Connection
1810 W State St.
Sycamore, IL. 60178
815-895-8733
Email: kbhardwood@aol.com
I am interested in purchasing rectangular samples (natural, uncoated) of woods of the world for teaching purposes and in receiving small samples of plant exudates of the world, for the following purposes. 1) I teach ethnobotany at Penn State, York and have only a minimal collection of materials to show students. I would like rectangular samples of woods of the world, which are easy to stack and store. If available, please, indicate the cost and the species. 2) One of my research projects is the study of plant exudates (i.e., resins, gums, phenolics, etc.) of the world via nuclear magnetic resonance spectroscopy. I have been doing this in collaboration with Dr. Joseph B. Lambert (Trinity University, San Antonio, Texas. All I need are 100 milligrams (ca. the volume of a new eraser on a traditional yellow pencil).

Jorge A. Santiago-Blay, PhD
Research Associate, Department of Paleobiology
National Museum of Natural History
Washington, DC 20560 USA
Email: blayj@si.edu
https://naturalhistory.si.edu/staff/jorge-santiago-blay

New Style of Shirts available. Small to XL $20.00, 2 XL TO 4 XL $22.00
With or without name on shirt.
Can be picked up at Shocco Springs AGM Meeting.
Cash or Check , made out to
Rick Long
812-327-9565
Email: rrlong1994@gmail.com

Regis-tree

New members of the International Wood Collectors Society

Albrecht, Bruce & Yvette #10413
645 Bay Esplanade
Clearwater Beach, FL 33767-1617, USA
Interests: 1,3,4
Email: iwcs@albruce.com

Lester, Bill & Janice Bloodworth #10414
101 Mountain View Dr.
Boerne, TX 78006-6228, USA
Interests: 1,2,4,6
Email: hwlesterbill@gmail.com

Mihalka, Jeffrey #10415
85 Amesbury Road
Montgomery, IL 60538-2474,USA
Interests: 1
Email: jamlinda@yahoo.com

Sprys, Joe & Carol #10416
1862 Plateau Drive SW
Wyoming, MI 49519-4953, USA
Interests: 1,2,4,5
Email: flyfishmichigan@gmail.com

Jost, John-Michael #10417
Box 14
Milk River, Alberta, T0K 1M0, CANADA
Interests: 1,4,5,7
Email: jmjjost1@gmail.com

Martinez, Guadalupe #10418
1222 Timber Bay Street
San Antonio, TX 78232-3440, USA
Interests: 4,5
Email: usmc1986@earthlink.net
Recruited by Mark Duff, TX, USA

Field, Francis W. #10419
165 S. Maple Ave.
Webster Groves, MO 63119-3023, USA
Interests: 1,3,4,5,6
Email: franfield49@gmail.com
Recruited by Burton Noll

Phillips, Lisa #10420
7110 Kinsdale Court
Springfield, VA 22150-4428, USA
Interests: 1,2,3,5
Email: lisaphillipsjp@gmail.com

Affholter, Larry* #10421
9924 Laurence Avenue
Allen Park, MI 48101-1397, USA
Interests: 1,2,4,5,6
Email: larryjaffholter@gmail.com

Johnston, Peter #10422
10 McCarthy Place
Charnwood, Canberra, ACT, AUSTRALIA
Interests: 4,5
Email: prjohnston@tpg.com.au

Slater, Craig & Christine #10423
101 Dwyer Street
Boulder, WA 6432, AUSTRALIA
Interests: 1,2,4,5
Email: craig.slater64@outlook.com
Recruited by I. Kealley WA, AUSTRALIA

I.W.C.S. ANNUAL MEETING
SHOCCO SPRINGS Baptist Conference Center, Talladega, AL.
September 25-29, 2023 Monday (Through Friday)
Early registration is recommended by July 25, 2023

Name:..... IWCS#.....Name on Badge……
Partner/Guest:..... IWCS#.....Name on Badge……
Address……
City:.....State:.....Zip Code:.....Country:.....
Email address:.....Home Phone#.....
First time to Annual Meeting? YES____ NO____ Cell Phone#.....

Make Checks Payable to IWCS. Send to Rick Long, P.O.BOX 545 Magnolia Springs,AL. 36555-0545
Email rrlong1994@gmail.com,or 812-327-9565 with any questions.
We will accept all major credit cards. But there will be a 5% FEE CHARGE added to it.
Credit Card number:_____Exp. Date:_____
3-digit security code:_____

Registration fee # of persons……..X $ 50.00 =$.....

Package includes rooms,meals and fees:
4 night lodging and 11 meals Monday Dinner through Friday Breakfast
$353.75 per person - double occupancy # of persons…….X $353.75 =$.....
$474.75 per person - single occupancy 1 X $474.75 =$.....
3 night lodging and 9 meals Arriving Day Lunch through Leaving Day Breakfast_____Day Arriving
$279.00 per person - double occupancy # of persons……..X $279.00 =$.....
$369.00 per person - single occupancy 1 X $369.00 =$.....

EARLY ARRIVALS CONTACT RICK LONG - 812-327-9565 (NO EMAILS PLEASE)
Personal Golf Cart Rentals for Meeting…….$140.00 = $.....

Put A Checkmark if you want a display table:_____ TOTAL DUE $_____

COMMUTERS, RV's and Guests NOT using package, complete below:

Registration fee # of persons……X $ 50.00=$.....
Commuters, RV's & Guest Fees $ 8.00 per person per day # days X # of persons…….X $8.00=$.....

RV sites are limited, please indicate: # days……X $30.00=$.....
Check type: Motorhome…….Travel Trailer……..Length…….. Total Due $_____

Commuters, RV's & Guests wanting meals must specify below. Meal prices are per person rate.

Monday No Breakfast Lunch…….Dinner……. Total Breakfasts…….X $9.25 =$.....
Tuesday Breakfast……Lunch…….Dinner…… Total Lunches……X $9.25 =$.....
Wednesday Breakfast……Lunch…….Dinner…… Total Dinners……X $9.25 =$.....
Thursday Breakfast……Lunch…….Dinner…… Total Due Meals……$_____
Friday Breakfast……No Lunch or Dinner

International Wood Collectors Society
12 August Alp Ct
St Charles MO 63303-5302, U.S.A.

Alerce (*Fitzroya cupressoides*) root bowl – article by Réjean Drouin #3589 starts on page 19.