LONG ISLAND MYCOLOGICAL CLUB

L.I. SPOREPRINT
1973-2014

http://limyco.org

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FINDINGS AFIELD

Aristotle advised us not "to recoil before the meanest form of animal life: for in every work of nature there is always room for admiration." With a bit of a stretch, now that it is agreed that fungi are organisms and not plants, we can apply that to this fungus, which I encountered growing on a Cherry tree recently: *Phlebia rufa.* I initially mistook it for its close congener, *P. tremellosa*, to which it bears a strong resemblance. However, I was able to obtain a good spore print, which was white. But the spores of *Phlebia tremellosa* measures 3.5-4.5 x 1-1.5(2) microns, and the spores of this specimen were 4.5-5.5 x 2-2.5, which exactly matches *P. rufa*. *Phlebia radiata* is similar microscopically, but is conspicuously radially folded. Phlebia is reported to be a polyphyletic genus, meaning that not all its species have a common ancestor. It is placed in the family Meruliaceae, class Polyporales. We will now add it to our LI Species Checklist.

Phlebia rufa

How Humans Have Shaped the Long Island Pine Barrens

By: Katharine Muether

(Reprinted by permission of the author from the Fall 2013 edition of "The Pine Barrens Today", newsletter of the LI Pine Barrens Society.)

The origin of the Long Island Pine Barrens has often been debated. The vegetation in the Pine Barrens thrives due to the acidic, nutrient-poor and dry soil composition common to Central Long Island. However, by studying the historical spatial changes of the area, it is apparent that humans have had a great influence in shaping the Pine Barrens that we all know and love today. Human disturbance throughout the past three-hundred years such as logging, land clearing and fire have promoted the growth and expansion of Pine Barrens vegetation. Pollen records, charcoal profiles, early maps and records help provide the evidence.

Pitch pines and their symbionts-Rocky Pt. Preserve

Today, while walking through the Pine Barrens, one expects to see native vegetation such as pitch pines, scrub oak, blueberry, huckleberry, grasses and forbs. However, if one stepped back in time, a couple centuries ago, the landscape would be drastically different from today. What we know as the "Pine Barren," today, was previously dominated by tree oaks, American chestnuts and other deciduous hardwoods. Pitch pine and scrub oak were

(Continued on page 6)

PRESIDENT'S MESSAGE

When you read this issue, you will notice that there are a lot of name changes in the myco world. Guessing that all of us have books going back several years and even more, it would be quite difficult to identify mushrooms by their current up-to-date names. I find it easiest to look up a species epithet (the second name with all small italic letters) which comes after the genus. For example: if I see the name *Chlorophyllum rachodes* in an article and not finding it in my books, I would say "What? Never heard of it." Then I would look it up under *rachodes* by firstly doing a Google search, which if your luck holds, will produce several synonyms: Chlorophyllum, Lepiota, Macrolepiota, and Leucoagaricus. To find the current name, enter one of these into the search box of Inddex Fungorum, Mycobank, or Mycoportal.

I will not complain of the lack of fungi this season. Instead, I have an easy recipe to try if you are lucky enough to find a chicken mushroom.

Creamed Chicken Mushrooms

Cut cleaned mushroom into 1/2 X 1 or 2 inch pieces. Saute in unsalted butter with some chopped scallions or shallots, being careful not to brown pieces. When soft, add ground green peppercorns, salt and some heavy cream. Simmer for 20 minutes or so until thickened. Add some chicken broth if mixture gets too thick. Serve over gnocchi , rice or pasta. (I used 3 cups of mushroom and a half pint of cream. Nothing is exact.) Enjoy.

I wish you a happy and productive summer and hope to see you along the trails.

EDITOR'S NOTE

We take our environment as a given, little thinking of the historical changes that have led to the current state. Our lead article remedies this lack, describing the evolution of our Long Island pine barrens, as a result of human intervention. Of course, natural processes also have held sway, as they have throughout our continent, with fungal diseases causing devastating losses of such beloved tree species as American Elm and Chestnut. There is no guarantee that global warming will not cause further change in species composition, as our Oaks remain under threat from the spread of Sudden Oak Death disease, which happily has not been found in the wild in the eastern US, although present in nursery stock.

Inevitably, our forests will change, and may become as different as ours presently are from those at the time of European settlement. One can scarcely begin to imagine the primordial forests of that time, and their accompanying fungal complement, which has no doubt changed as their hosts were diminished. Global warming will accelerate this change, and we will see more southerly species advance northward. Documentation of such change depends upon reports from citizen scientists, collectors such as ourselves, which makes Mycoportal and allied endeavors indispensible.

MATERIAL FOR THE AUTUMN, 2014 EDITION SHOULD REACH THE EDITOR BY AUGUST 31

(Submissions may be forwarded by email in any format or typed.)

(All unsigned articles authored by editor.)

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OH, WHAT A SHORT, STRANGE SEASON IT'S BEEN….

Once again, the Black Morel, now correctly called *Morchella angusticeps,* eluded us completely on Long Island for the third straight year, and was diminished elsewhere in the Northeast as well. On the other hand, we received multiple inquiries from the public regarding single specimens of the Eastern Yellow Morel which appeared mysteriously and inexplicably in their yards. Presently, its scientific name remains up for grabs between two vying schools of researchers, so it is better referred to by what I think should be its common name. I was flabbergasted to come across one in Valley Stream State Park (right). One lucky member of the public who contacted us for a positive identification had found an entire field of them in a Freeport yard, apparently associated with a stricken Cherry tree (see photo below) and harvested over 30. This putative association has never been documented before and cannot be considered proven, but does provide food for thought. I, for one, will not be able to pass an injured Cherry tree in the Spring without carefully checking the environs.

Lone Morel-Valley Stream SP

Our webmaster, Dale Robins, a known avid Morel hunter, made what he called "The find of my life" in Ulster county, where he was visiting relatives, and offhandedly inquired as to whether they were familiar with the edible fungus known as Morel which resembled a sponge on a stem. Remarkably, they were, although not being mushroomers, and led him to a lawn where he was able to harvest two shopping bags full (see photo), which he and his family feasted upon for days. Despite searching far and wide, east and west, under Elms and Apples, I personally was able to find less than a handful, and most accidentally while out engaging in activities other than mushrooming.

FREEPORT MORELS

DALE'S BONANZA

With no production in the last three years, we may be faced with the inescapable conclusion that our traditional site for *Morchella angusticeps* is no longer dependable, and that other areas must be sought out, perhaps off-island. In this quest, we enlist all our members to recall any tales they have heard or dim memories they may have, of productive areas either here or within reasonable driving distance. We will then explore any such areas next Spring to see whether we can add them to our foray schedule. Old apple orchards are a fertile hunting ground for the Eastern Yellow Morel, and if you know of any that are accessible, or if you have any connection with orchardists please let us know so that we leave no stone unturned. The Black Morel, as most active members know, is best sought among Tulip Poplar, *Liriodendron tulipifera,* but not all stands produce on a regular basis, some only erratically and irregularly, in "good" years, particularly on L.I., but it is impossible to predict when. Some more northerly sites where the sweeter, less acidic soil is more conducive to the Black Morel are more predictable, so, this is another possibility we would like to explore. If you know of such stands in nearby northerly counties, please share them with your fellow members.

A FUNGAL ODDITY

The pictured group, encountered by Peggy and I in Caumsett SP on May 31 is a group of *Pluteus cervinus* growing together with a seeming *Pluteus petasatus.* Our science advisor, Ben Wolfe, Ph.D., believes that the likely explanation is that "petasatus" is actually a mutant of *P. cervinus,* having turned off melanin (or other pigmentation) genes, and is actually a color mutant. Another option would be that it actually is a different species that happened to be growing in the same spot and produced a fruiting body at the same time, but that is considered unlikely. I could detect no microscopic difference, but note that the "petasatus" has dark scales on the disc, which *P. cervinus* lacks.

Announcing LIMC on Yahoo Groups

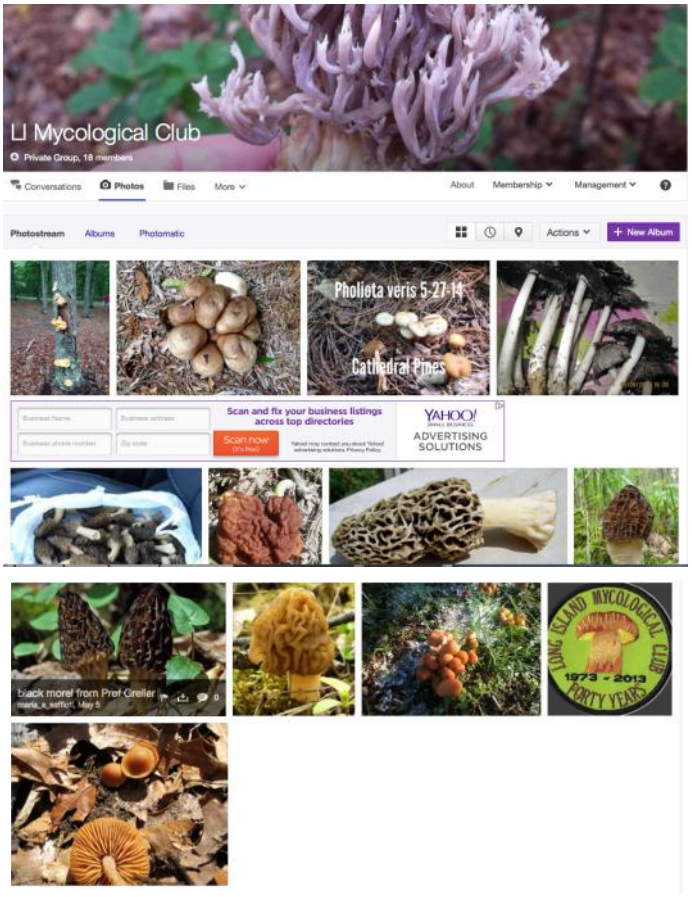
By Maria Saffioti

For the first time, LIMC now has an exclusive feature for members only: a digital forum where members may post pictures, have mushroom related discussions and post links, recipes, news stories of mushroom poisonings etc. (See website photo page image on the right.) Imagine being able to post a picture of an unknown fungus you found in your backyard and finding out what it is within hours. You know that if you wait for the next foray, that specimen will disintegrate. What about using a key? Believe me, identification via forum is much better and easier. In my case, probably much more accurate too.

Members may also create polls, post links and upload files. Feel free to explore, post, ask and answer questions. I don't want this to become my own personal webpage, so please help me out. Yes, everyone wants to see what you found on your own—don't be shy!

In order to protect our group's privacy, access to the forum is by invitation only. Invitations were sent at the beginning of year but if you lost it in your spam box, don't worry. I will send you another one to any email you want upon request. Just email me: msoto640@yahoo.com. I will send you a heads up beforehand since the invites have a spammy look to them.

Some members have trouble accessing all the features of the group forum. Full access privileges require setting up a Yahoo account. Otherwise, you may still join but you will be an "email only" member. Other members have a yahoo account but may have issues involving multiple yahoo ids, for example. Check your yahoo profile if that is the case. Also try the help feature. On my browser it is the on the upper right hand corner. Yahoo even offers online help for access issues so take advantage of it.



Above: LIMC Yahoo groups website showing photos submitted by members. Clicking on a photo shows more info.

Hope to see you soon on Yahoo Groups!

(Editors note: Although Maria is too modest to mention it, she deserves full credit for originating, moderating and maintaining the site.)

WELCOME, NEW MEMBERS

Jane & Robert Barbieri

Shreena Bindra

Chris Nellen & Liz Baron

Maria & Rosario Caradonna

Benjamin Denery

Elizabeth & Mike Eipper

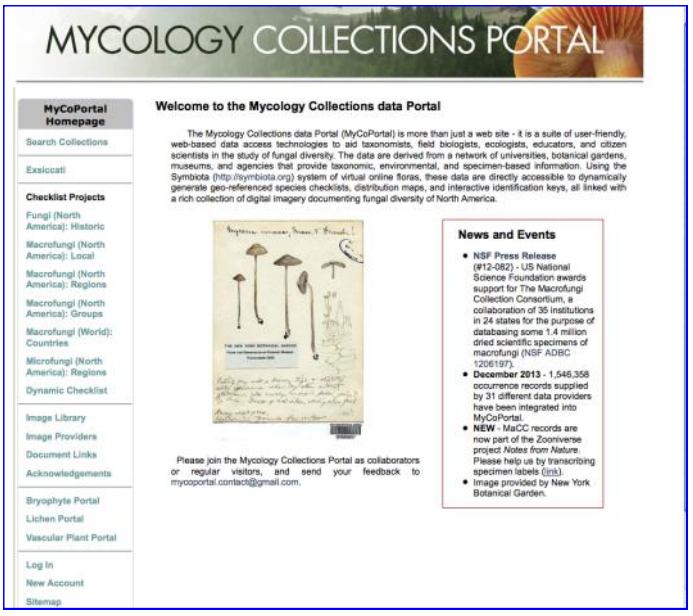
Bennet Moran & Peter Flammia

■**MOREL "GOLD" RUSH IN CALIFORNIA:** Last summer's devastating 400 square mile fire in Stanislaus National Forest resulted in a record flush of Morels (estimated to amount to as much as $40 million) that had both commercial and amateur hunter's wild with anticipation. However, because of perceived danger from unstable terrain and scorched trees, the Nat'l Forrest Service has closed the area to hiking and mushrooming, although some recreational areas remain open. This has not deterred collectors who despite the threat of a $5,000 fine were hauling out hundreds of pounds daily early in June; they could be spotted in local bars, dressed in camouflage attire. *(Wild Mushrooms Entice Smugglers to Fire-Ravaged California Forest, The NY Times, 6, 2014)*

■ **A BOLETE BY ANY OTHER NAME….** A just published extensive study of the "butter boletes", (edible boletes with yellow flesh and yellow pore surface that stains blue) has resulted in a reshuffling of taxon names and the christening of six new species, four from western USA and two from Asia. The research encompassed 14 members of this group in NA, Asia, Europe, and N. Africa, using both molecular and morphological data. A new genus, *Butyriboletus,* has been erected and applied to eight species previously classified as *Boletus*. Two of them are East Coast species found on our checklist, which are now correctly referred to as *Butyriboletus appendiculatus,*and *Buytriboletus brunneus,* formerly *Boletus speciosus var.brunneus.* This is the bolete pictured on our club patch. The closest relatives to *Butyriboletus* are, surprisingly, the red-pored *Boletus frostii* and *B. floridanus. (Clarifying the butter Boletes: a new genus, Botyriboletus is established, etc., David Arora & Jonathan Frank, Mycologia, May/June 2014, vol. 106 no. 3, 464-480)*

(Compiled by editor from cited sources.)

GETTING THE MOST OUT OF MYCOPORTAL



In the last edition we pointed out that the Mycoportal website (mycoportal.org) was up and running, and that the Long Island species checklist had been added under the category of "Macrofungi (North America):Local", which encompasses local collections that are less than statewide, or of specialized habitat, such as Pine Barrens. Presently, we are one of five such localities reporting, and when you click upon the name of our group, a list of 882 taxa (species and subspecies) appears, organized by family. For those of us who have not dwelt very much on the hierarchy of species, some surprises are in store. For example, the very first family listed is the Agaricaceae, and as we proceed down the list, we meet some non-gilled representatives such *Calvatia* (puffball) and *Cyathus* (bird's nest) species, as well as gilled species we may not have thought of as Agarics, such as Coprinus. In addition, while we may recognize specific epithets, such as *rachodes*, we find it paired not with the expected genus *Macrolepiota* but with *Chlorophyllum,* which old timers, including myself, will immediately connect with the poisonous *molybdites*. This will take some getting used to, even for early adapters.

Indeed, this can be a learning tool to familiarize oneself with these new, unfamiliar names. On the left side of the home page there is a clickable list of six "Checklist Projects", or collections. At the top of each collection page resides a search box, where one can enter a known name, after checking the Synonyms box. In this case, we enter *Macrolepiota rachodes* and the system will spit out the latest preferred name: *Chlorophyllum rachodes* and also subsume it under its family, the Agaricaceae. This will allow us to remain up-to-date, though truth to tell, no one will be confused if you choose to retain the old, familiar name, which is an acceptable synonym. Be aware that regional forays, academic venues, etc., will use the preferred names. One caveat, however: some name changes are not synonyms, but the result of "splitting" and the creation of a new species. So entering the species *Megacollybia plattyphyla* will not

(Continued on page 7)

Humans & Pine Barrens *(Continued from page 1)*

present back then, but in much smaller numbers than today. The vegetation of the area changed to its current state some 200 years ago, due to an increase in human-caused disturbance.

Euro-Americans began settling on Long Island in the mid-17th century and thus, began the disturbance of an ancient environment. This involved extensive land-clearing and the establishment of a logging industry, using wood for building, fuel and shipbuilding. Wood was exported to New York City and other surrounding areas. In the year of 1812 alone, Brookhaven Town exported over 100,000 cords of wood. Hardwood trees (dominant in the area at the time) were preferred over Pitch pines for fuel and cooking because they burned evenly and produced less soot. Large tracts of land across central-eastern Long Island were left barren, stripped of their primordial hardwood vegetation due to logging and brush removal. This heavy removal of hardwoods during the first few centuries of Long Island's establishment provided an opportunity for the shade-intolerant pitch pine and scrub oak to expand in numbers.

The pollen record for Deep Pond (Wading River, NY) has been studied to help examine this change in vegetation and to determine its causes. Pollen profiles were taken by examining levels of pollen trapped deep in pond sediments. Pre-settlement pollen levels account for only 15% pitch pine and around 50% for oak. These profiles show that pitch pine pollen levels increase dramatically after Euro-American settlement begins and that tree oak pollen levels decreased. The clearing of hardwood trees that began with human settlement allowed the shade-intolerant pitch pine to take root.

Fire frequency and intensity also increased with early Long Island settlement. Almost all fires (90%) at this time had human causes. Fires were commonly used for land clearing (burning brush) and for cooking. The establishment of the Long Island Railroad was also a great source of fire during this time. Fires were started by sparks and by hot embers dumped along the tracks. With little or no means of fire suppression, these fires quickly expanded and often burned for weeks at a time. In 1862, one fire was so extensive, that it started in Smithtown and swept all the way into Southampton – essentially burning the entire middle of the island. By the year 1911, the Pine Barrens were burned so much that the area was seen as unproductive and untaxable.

Charcoal profiles have also been studied in Deep Pond. Sediments were examined for varying levels of charcoal within the sediment over time. Charcoal levels almost doubled after settlement. An increase in fire-frequency favored the establishment of the pitch pine. Pitch pines are more adapted to fire than tree-oaks, with thick bark and serotinous pine cones, (protecting the seeds from the fire and only opening and releasing seeds after the fire). Oaks also have a longer fire-return interval, taking them longer to return after a fire has burned the area. Pitch pines are dependent on fire (and other disturbances) in order to maintain their dominance over hardwoods.

Pitch pine-oak-heath woodlands and pitch pine-scrub oak barrens expanded so much after Euro-American settlement that they stretched as far west as Hicksville and Farmingdale. Some of these woodlands also covered large sections of Central Park.

Looking again at the pollen profiles for Deep Pond, we see that after 1920, pitch pine began to decline and scrub oak gradually reestablished itself as the dominant tree. This is mainly due to a lack of disturbance, including a flagging logging industry and the development of fire suppression methods. Without fire, oaks and other hardwoods will gradually replace the pitch pine in dominance. In the future, development is not the only threat to our precious ecosystem; fire suppression is also an important threat to these complex plant communities.

(An important point not touched upon is the fungal component in these forests. Mycorrhizal fungi are particularly active in nutrient poor soil, such as the sandy and acidic pine barrens, where they supply their associated hosts with both water and mineral nutrients. It has been demonstrated experimentally that pines grown without their fungal symbiont have a diminished survival and growth rate; in the wild, expert opinion holds that pines and oaks cannot survive without them.-Editor)

There once was a type of Coprinus.
'Twas said it was one of the finest.
But when eaten with ale
Made one sickly and pale.
And, for us, that was too big a minus.
(by Linda Murfitt of NHMS)

FORAY RESULTS SUMMARY

Welwyn, April 19: Cancelled

Welwyn, April 26: Although the target species, *Morchella*, was conspicuous in its absence, eager eyes were able to find and collect a total of 14 species, a record for this time and place. Among them were several previously uncollected species of Ascomycetes, now identified with the aid of the newly published Beug & Bessette guide to this phylum: *Diatrype stigma, Annulohypoxylon annulatum,* and *Hypoxylon fragiformis.* The only edible was a small group of *Flammulina velutipes.*

Annulohypoxylon annulatum

Planting Fields, May 3: A disappointing total of only 4 species were found, but two were edibles: *Stropharia rugosoannulata* and *Coprinellus micaceus.*

Bethpage SP, May 17: A respectable total of 13 species were collected, with a generous amount of the target species, *Pleurotus populinus*, much harvested from high on the host trees. Other edibles were Wine Caps, Weeping Widow *(Lacrmymaria lachrymabunda*-previously *Psathyrella velutina),*and *Collybia dryophila.* The European invasive, *Agrocybe putaminum,* was in good numbers, and there are some positive reports of its edibility, the bitter taste said to disappear on cooking.

Agrocybe putaminum

Manna from Heaven: Harvesting Spring Oysters-Andrew slashes, Roger catches.

Extra-foray Reports:

Outside of the forays, members have been reporting their own finds, and also posting to our newly established Yahoo groups account (see page 4) of their personal finds, including Wine Caps, Oysters, and both Chickens, *Laetiporus cincinnatus* and *L. sulphureus,* which should perhaps be referred to as the Light Meat and Dark Meat Chicken Mushroom, respectively. In our wanderings, Peggy and I have also recently found edible Russulas (compacta, variata), Lactarius, Amanita, Boletes (B.subvelutipes, T. felleus, X. affinis) Last week produced Black 'Trumpets and *Suillus granulatus.*

Also, for the first time since Matheny's full description of *Inocybe unioolor* was published here in the last issue we have now collected it in Southaven CP, and can legitimately add it to our list.

Getting the Most out of Mycoportal *(Cont'd from page 5)*

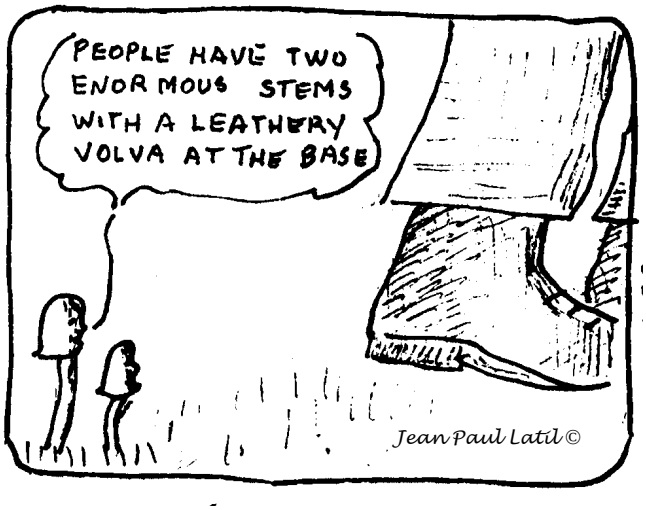
produce the correct name of the N. American East Coast *Megacollybia, M. rodmani*, since that is not a synonym but a recently discovered species different from the European *M. plattyphyla.*

While the point of this website is to conglomerate and exhibit the presence and distribution of all known macrofungi, this is a task that has only just begun, so large gaps remain, and the distributional picture is incomplete and not reflective of known, probable or suspected distributions. (To show the distribution of a species, click on the species name and then click on the map that appears.)For example, *Agaricus comtulus,* an uncommon but widespread species throughout the USA only shows up in only three eastern locales, L.I. being one of them.

Additionally, one can search for a species across all 35 contributing collections or in a single collection, such as the NY Botanical Garden. If you want to investigate an entire group of fungi, such as Boletes or Lactarius, that is possible, but as of now not all groups are included: Russulas, Entolomas, and Incybes are some of the missing genera.

Its not all a slog, there is some fun to be had as well. On its page every Checklist Project has next to its name "Games" and clicking on it brings up a "Name Game" and a "Flash Card Quiz" based upon the species in that particular list, but not including them all. The quiz associated with our list has 562 out of a total of 884 species. A clickable box allows you to select a species name; if you don't get it right, you can try again, or click"Tell Me What it is!" to get the right name. This is a great method to acquaint yourself with our mycota. If you want to test yourself on a particular genus, e.g., Boletus, that is possible, but unfortunately, not the entire taxonomic group Boletaceae.

There is much more to discover on Mycoportal. Give it a try!



IN THIS ISSUE

Jean Paul Latil©

Even so in the study of animals, whatever they may be, we should never turn away from them in disdain, because in all, without exception, there is some trace of the power and beauty of nature.

Heraclitus

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