

In General:

- **Use Dominant/Important Fossil** (most detail/"rare")
- **In Growth Position/Orientation**
- **As Upright/Straight As Possible**
- **Venation Branches Up**
- **When No Obvious Up/Down, Longest Dimension Horizontal - Straightest Side to Bottom**
- **Lighting Direction From Upper Left; Minimal Shadows In Lower Right**
- **Capture As Much Detail As Possible**






This **web version** does not have storage locations.

However, the collections use only version, has current locations listed below each example in case more details or a direct comparison is needed.

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures





Specimen Orientations for Photography

To see examples of:

Leaves, Fronds, Leaflets, Pinna, Pinnules		See page 3
Stems, Bark, Wood, Roots		See page 10
Rocks With No Visible Fossils		See page 19
Multiple Fossils [but follows predominate fossil]		See page 20
Algae/Stromatolites		See page 23
Seeds, Fruits, Flowers, Cones		See page 24
Invertebrates (if present)		See page 27
Special Situations – Orientation & Size Related		See page 28
Special Situations – Pieces & Sections		See page 30
Special Situations – Consecutive Sections		See page 32
Special Situations – Condition Related (Documentation)		See page 34
Special Situations – Repaired/Post Conservation (Documentation)		See page 38





Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Section 1

Leaves, Fronds, Leaflets, Pinna, Pinnules	
 <p>00007767</p>	 <p>00008927</p>
Leaf – <i>Sassafras cretaceum</i> var. <i>grossidentatum</i> Newberry	Leaf – <i>Cathaysiopteris</i> sp.
 <p>00008922</p>	 <p>00001532</p>
Leaf – <i>Taeniopteris</i> sp.	Pinnule – Fern

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures

Specimen Orientations for Photography

Leaves, Fronds, Leaflets, Pinna, Pinnules			
			
<p>Leaf – <i>Gigantopteris</i> sp.</p>		<p>Leaf – <i>Cordaites</i> sp.</p>	
			
<p>Leaf – <i>Zamites</i> sp.</p>		<p>Frond – <i>Pseudopecopteris mazonia</i></p>	

Specimen Orientations for Photography

Leaves, Fronds, Leaflets, Pinna, Pinnules



Frond - *Alethopteris* sp.



Frond - *Neuropteris* sp.



Frond - *Neuropteris* sp.



Frond - *Pecopteris pseudovestita*

Specimen Orientations for Photography

Leaves, Fronds, Leaflets, Pinna, Pinnules



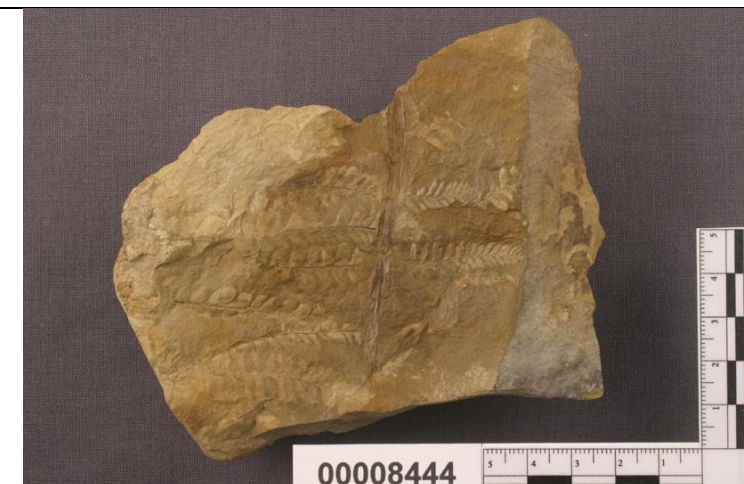
Leaf/Frond – *Callipteris* sp.



Frond with Leaflets- *Pecopteris* sp.







Frond with Leaflets – *Pecopteris* sp.







Frond with Leaflets – No ID

Specimen Orientations for Photography

Leaves, Fronds, Leaflets, Pinna, Pinnules	
 <p>00002104</p>	 <p>00005452</p>
Frond – No ID	Leaf – <i>Walchia</i> sp.
 <p>00008784</p>	 <p>00003302</p>
Leaves – Conifer	Leaf – <i>Pinus</i> sp.

Specimen Orientations for Photography

Leaves, Fronds, Leaflets, Pinna, Pinnules	
 <p>00006445</p>	 <p>00002462</p>
Leaves - <i>Annularia</i> sp. with stem	Leaves - <i>Annularia</i> sp. single whorl
 <p>00004597</p>	 <p>00004152</p>
Leaves - <i>Asterophyllites</i> sp. with stem	Leaves - <i>Asterophyllites</i> sp. with stem

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures

Specimen Orientations for Photography

Leaves, Fronds, Leaflets, Pinna, Pinnules



00014023

Leaves – *Sphenophyllum* sp. with stem



00007488

Leaf – Angiosperm



00006039

Leaves – *Lepidophylloides* sp.



00003692

“Leaf” / “Stem” – *Rhacophyton* sp.





Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Section 2


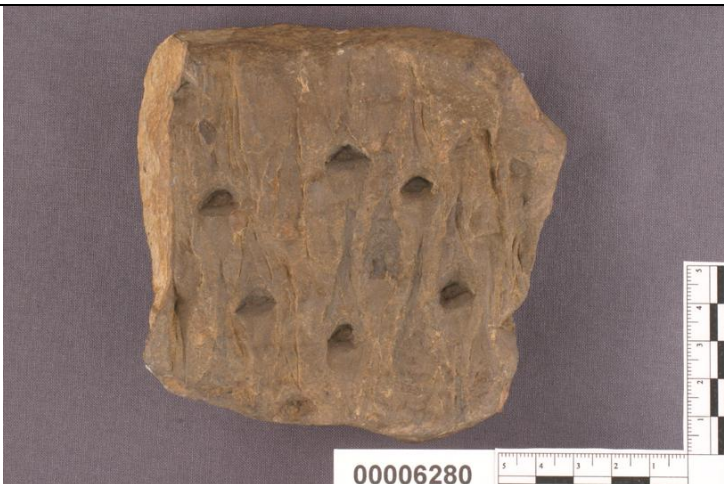
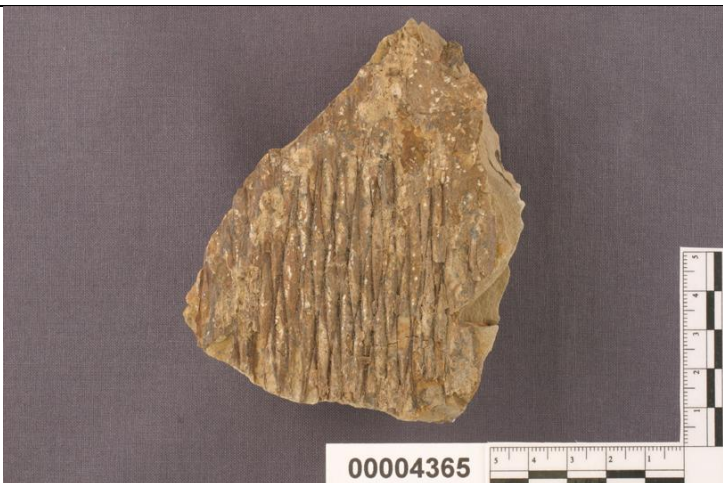

Stems, Bark, Wood, Roots	
 <p>00004136</p>	 <p>00004246</p>
<p>Stem – <i>Calamites</i> sp. (mold) Ribs vertical; wider at bottom; curvature at nodes up</p>	<p>Stem – <i>Calamites</i> sp. (impression) Ribs vertical; wider at bottom; curvature at nodes up</p>
 <p>00003692</p>	 <p>00012058</p>
<p>"Leaf" / "Stem" – <i>Rhacophyton</i> sp.</p>	<p>Stem – Fern Rachis (impression)</p>

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures





Specimen Orientations for Photography

Stems, Bark, Wood, Roots	
	
Stem – Fern Rachis (impression)	Stem – <i>Artisia</i> sp. (cast)
	
Stem – <i>Lycopodites</i> sp.	Stem/Bark - <i>Lepidodendron</i> sp. (tall diamond); Ligule Pit (small circle) Up


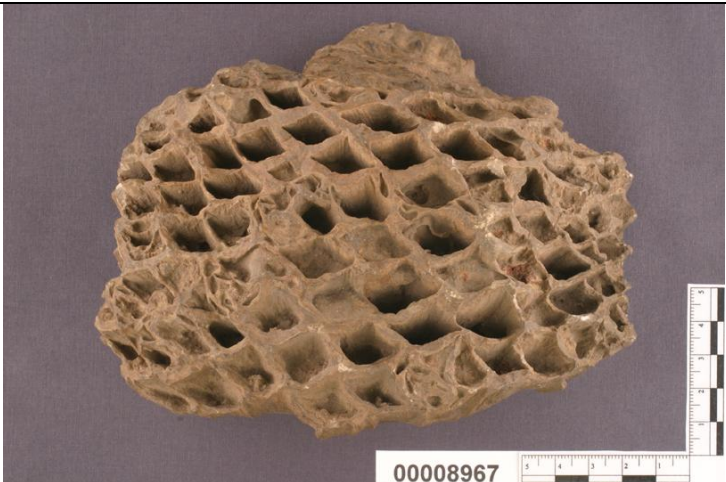
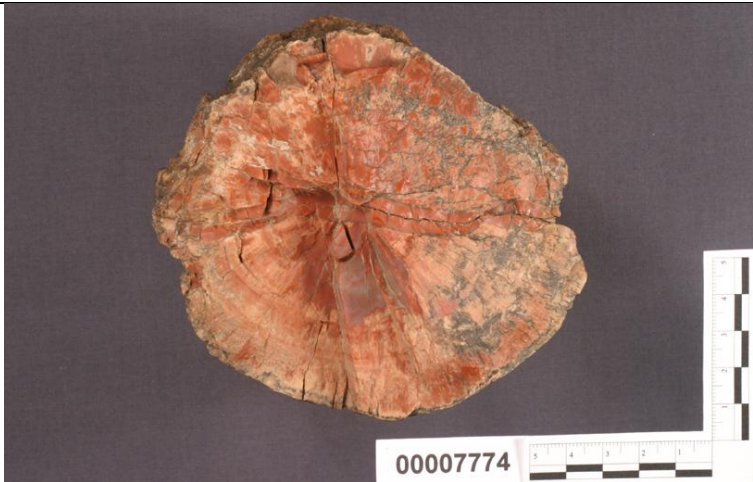

Specimen Orientations for Photography

Stems, Bark, Wood, Roots			
			
00008033		00006280	
Bark - <i>Lepidodendron</i> sp. (tall diamond); Ligule Pit (small circle) Up		Bark - <i>Lepidodendron</i> sp. (tall diamond); Ligule Pit (small circle) Up	
			
00004365		00008220	
Bark - <i>Lepidodendron</i> sp. (tall diamond); Ligule Pit (small circle) Up		Bark - <i>Lycopsida</i> indetermin. Striations vertical	

Specimen Orientations for Photography

Stems, Bark, Wood, Roots			
			
Bark - <i>Lepidophloios</i> sp. (wide diamond); Ligule Pit (small circle) Up	Bark - <i>Sigillaria</i> sp. (vertical rows); Ligule Pit (small circle) Up		
			
Bark - <i>Sigillaria</i> sp. (vertical rows); Ligule Pit (small circle) Up	Bark - <i>Sigillaria</i> sp. (vertical rows); Ligule Pit (small circle) Up		

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography





Stems, Bark, Wood, Roots	
 <p>00007774</p>	 <p>00008967</p>
Bark - Petrified Wood	Bark - <i>Cycadeoidea</i> sp.
 <p>00007774</p>	 <p>00008967</p>
Wood (radial cut) - Petrified Wood	Wood (radial cut) - Top of <i>Cycadeoidea</i> sp.

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography





Stems, Bark, Wood, Roots			
 <p>00007769</p>		 <p>00007775</p>	
Wood (radial cut) – <i>Sequoia</i> sp.		Wood (radial cut) – Palm	
 <p>00007768</p>		 <p>00007771</p>	
Wood (transverse cut) – <i>Sequoia</i> sp.		Wood (transverse cut) – Palm	

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures

Specimen Orientations for Photography





Stems, Bark, Wood, Roots			
			
Wood (transverse) – <i>Psaronius</i> sp.		Wood (radial cut) – <i>Callixylon</i> sp.	
			
Wood (radial cut) – <i>Medullosa</i> sp.		Wood (radial cut) – <i>Callixylon</i> sp.	

Specimen Orientations for Photography

Stems, Bark, Wood, Roots			
			
<p>Wood (transverse cut) - No ID</p>		<p>Wood (radial cut) - <i>Juglans</i> sp.</p>	
			
<p>Root - <i>Stigmarian axis</i> (dimples); Longest dimension horizontal, unless branching</p>		<p>Root - <i>Stigmarian axis</i> (dimples); Longest dimension horizontal, unless branching</p>	



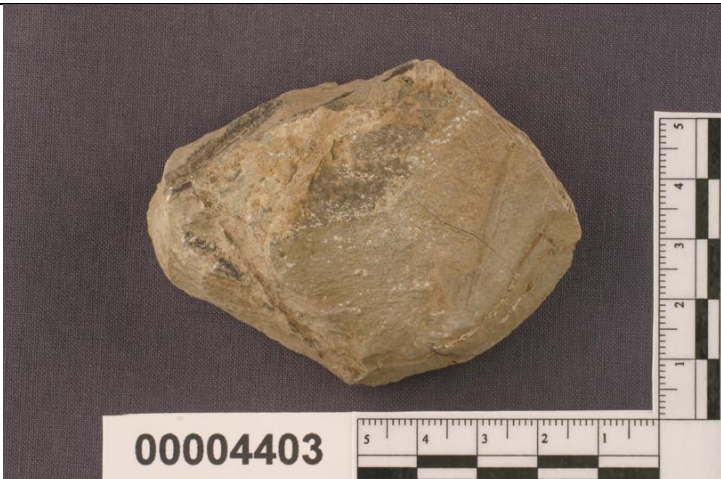

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures

Specimen Orientations for Photography

Stems, Bark, Wood, Roots			
			
<p>Root - <i>Stigmarian axis</i> (dimples); Longest dimension horizontal, unless branching</p>		<p>Root - <i>Stigmarian axis</i> (dimples); Longest dimension horizontal, unless branching</p>	
			
<p>Roots - <i>Pinnularia</i> sp. Longest dimension horizontal, unless branching</p>		<p>Roots - <i>Pinnularia</i> sp. Longest dimension horizontal, unless branching</p>	





Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Section 3

Rocks With No Visible Fossils	
	
Rock - No ID	Rock - No ID
	
Rock - No ID	Rock - No ID Aligned so can read number

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Section 4

Multiple Fossils [but follows predominate fossil]	
 <p>00006399</p>	 <p>00004150</p>
Ferns – No ID & No ID Split difference	Ferns – <i>Pecopteris</i> sp. Split difference
 <p>00004445</p>	 <p>00004287</p>
Ferns – <i>Pecopteris</i> sp. Split difference	Ferns – <i>Alethopteris</i> sp. Split difference

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures

Specimen Orientations for Photography

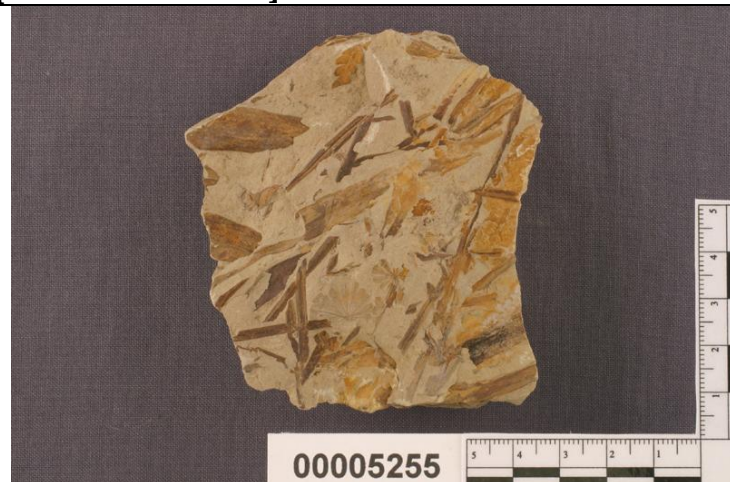
Multiple Fossils [but follows predominate fossil]	
 <p>00006577</p>	 <p>00004115</p>
<p>Ferns & Stems – <i>Alethopteris</i> sp., <i>Neuropteris</i> sp. & No ID Dominant fossil = 1st orientation</p>	<p>Ferns – <i>Pecopteris</i> sp. & <i>Pecopteris</i> sp. Dominant fossil = 1st orientation</p>
 <p>00008273</p>	 <p>00009761</p>
<p>Ferns & Stem – <i>Neuropteris</i> sp., <i>Neuropteris</i> sp., <i>Pecopteris</i> sp., & No ID Majority = 1st orientation</p>	<p>Leaves – <i>Taeniopteris</i> sp., <i>Walchia</i> sp., & No ID Majority = 1st orientation</p>

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Multiple Fossils [but follows predominate fossil]



Leaves – *Lepidophylloides* sp.
 Most “picturesque” looking



Leaves – *Annularia* sp. & *Lepidophylloides* sp.
 Most “picturesque” looking







Leaves – *Lepidostrobophyllum* sp.
 Most “picturesque” looking



Multiple Leaves – No ID & No ID
 Most “picturesque” looking





Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Section 5



Algae/Stromatolites			
			
Stromatolite – Algae Curves arch upward		Stromatolite – Algae Curves arch upward	
			
Stromatolite – <i>Girvanella ocelata</i> Curves arch upward		Stromatolite – Algae Rings visible	

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography





Section 6

Seeds, Fruits, Flowers, Cones	
 <p>00003184</p> <p>Seed – No ID Longest axis vertical, unless attachment down</p>	 <p>00006388</p> <p>Seed - <i>Triganocarpus</i> sp. Attachment down</p>
 <p>00008373</p> <p>Fruit – <i>Sparganium stygium</i> Heer</p>	 <p>00014041</p> <p>Seed – No ID Attachment down</p>

Specimen Orientations for Photography





Seeds, Fruits, Flowers, Cones	
 <p>00003256</p>	 <p>00014063</p>
<p>Flower – <i>Holmskioldia speirii</i> (L.) MacGintie</p>	<p>Seed – <i>Rhabdocarpus</i> sp. Attachment down</p>
 <p>00005841</p>	 <p>00004235</p>
<p>Seed – <i>Triganocarpus</i> sp. Attachment down</p>	<p>Seed – <i>Cardiocarpon annulatum</i></p>

Specimen Orientations for Photography

Seeds, Fruits, Flowers, Cones			
			
<p>Close-up of Seed - <i>Triganocarpus</i> sp. Attachment down</p>		<p>Cones - No ID Attachment down</p>	
			
<p>Cone - <i>Lepidostrobus</i> sp. Attachment down</p>		<p>Cone - <i>Cordianthus</i> sp. Attachment down</p>	

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Section 7

Invertebrates (if present)	
 <p>00005249</p>	 <p>00004494</p>
Invertebrate – <i>Derbyia</i> sp.	Invertebrate – <i>Aviculopecten</i> sp.
 <p>00004491</p>	 <p>00004352</p>
Invertebrate – <i>Aviculopecten</i> sp.	Invertebrates – <i>Marginifera</i> sp.

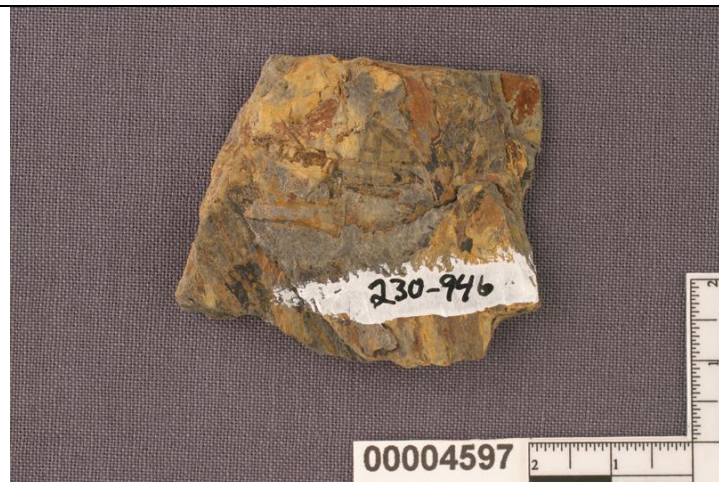
Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Section 8

Special Situations - Orientation & Size Related



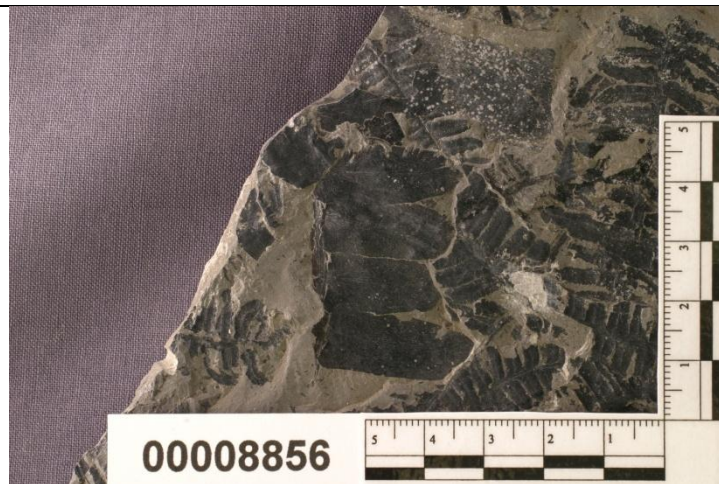
2 cm scale bar – *Asterophyllites* sp.



2 cm scale bar – Rock




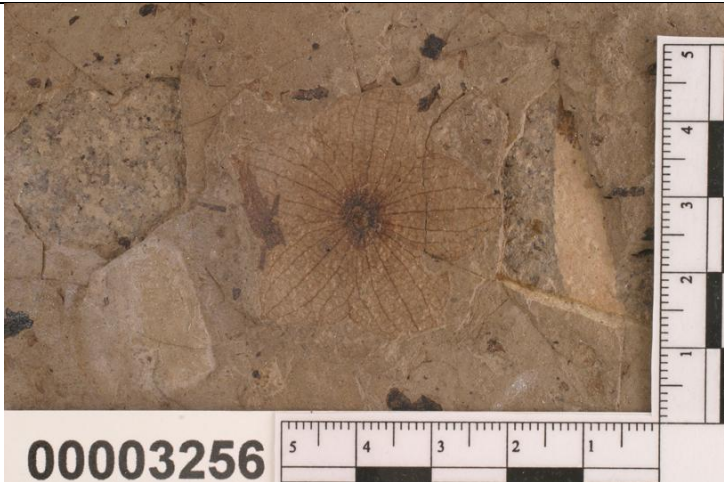


Oversized – Multiple Specimens
 As oriented for main “form” <Oversize Procedures – Olympus Camera>



Oversized – Multiple Specimens but Close -up of *Neuropteris* sp.
 As oriented for main “form”

Specimen Orientations for Photography

Special Situations - Orientation & Size Related	
 <p>00004486</p>	 <p>00004432</p>
Slightly Oversized - <i>Lepidodendron</i> sp.	Straight as possible - <i>Pecopteris</i> sp.
 <p>00006388</p>	 <p>00003256</p>
Close-up - <i>Triganocarpus</i> sp. As oriented for main "form" but zoomed in	Close-up - <i>Holmskioldia speirii</i> (L.) MacGintie As oriented for main "form" but zoomed in

Specimen Orientations for Photography

Section 9

Special Situations - Pieces & Sections



"Broken," 2 pieces - Rock
As oriented for main "form"



Specimen falling apart - "*Lepidodendron* sp."
In box with shortest box dimension up







"Broken," 2 glued pieces - *Sparganium stygium* Heer
As oriented for main "form"






Sectioned part of trunk - *Medullosa* sp.

Specimen Orientations for Photography

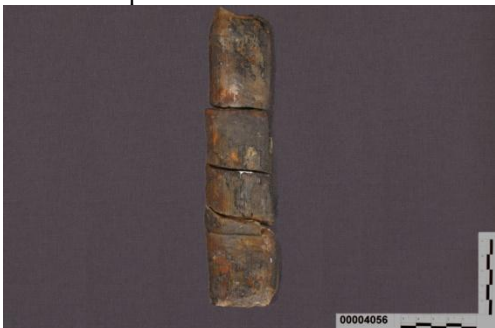




Special Situations - Pieces & Sections	
 <p>00004055</p>	 <p>00003960</p>
2 Sections of <i>Calamites</i> sp. - A, B	3 Sections of <i>Araucaria</i> sp. - A, B, C
 <p>00004056</p>	 <p>00014065</p>
4 Sections of <i>Calamites</i> sp. -A, B, C, D	2 sections of <i>Dadoxylon deupreei</i> - A, B

Specimen Orientations for Photography

Section 10

Special Situations - Consecutive Sections	
Specimen in 2 Sections	
	
2 Sections of <i>Calamites</i> sp. mold - A, B	
	
Section of <i>Calamites</i> sp. mold - Section A	Section of <i>Calamites</i> sp. mold - Section B


Specimen Orientations for Photography

Special Situations - Consecutive Sections			
<p>Specimen in 4 Sections</p> 			
4 Sections of <i>Calamites</i> sp. mold -A, B, C, D			
			
Section of <i>Calamites</i> sp. mold - Section A			Section of <i>Calamites</i> sp. mold - Section B
			
Section of <i>Calamites</i> sp. mold - Section C			Section of <i>Calamites</i> sp. mold - Section D

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures





Specimen Orientations for Photography

Section 11

Special Situations – Condition Related (Documentation)			
			
<p>Old Repairs (Front) - Fruit – <i>Sparganium stygium</i> Heer As oriented for main “form”</p>		<p>Old Repairs (Back) – “Repair” As oriented for front main “form”</p>	
			
<p>Old Stabilization (Front) - Leaf – No ID As oriented for main “form”</p>		<p>Old Stabilization (Back) – “Stabilization material” As oriented for front main “form”</p>	

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures

Specimen Orientations for Photography

Special Situations - Condition Related (Documentation)			
			
<p>Old Repairs (Front) - Stem – <i>Calamites</i> sp. As oriented for main “growth orientation”</p>		<p>Old Repairs (Back) - Stem – <i>Calamites</i> sp. As oriented for main “growth orientation” & to show old repair</p>	
			
<p>Specimen in 2 pieces (Front) – <i>Pecopteris</i> sp. As oriented for main “form”</p>		<p>Specimen in 2 pieces (Back) - Rock As oriented for main “form”</p>	

Specimen Orientations for Photography

Special Situations – Condition Related (Documentation)



Specimen from box with portion of specimen self-sampling
In box with shortest box dimension up



Portion of specimen self-sampling
In box with shortest box dimension up

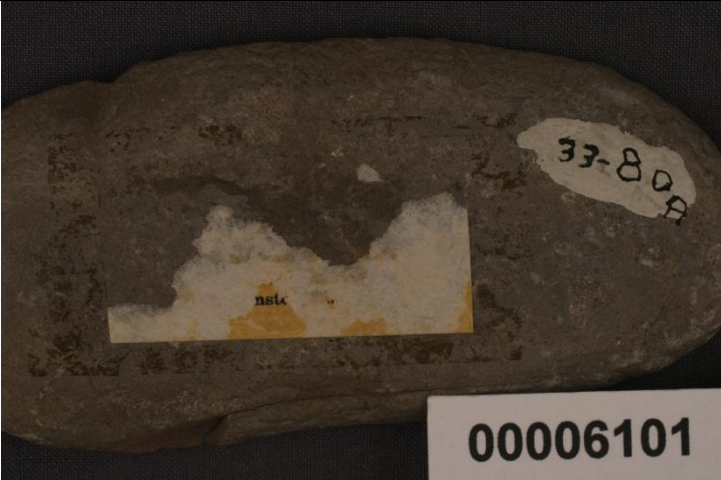





Specimen self-sampling – *Neuropteris* sp.
In box with shortest box dimension up



Specimen self-sampling – "*Lepidodendron* sp."
In box with shortest box dimension up

Specimen Orientations for Photography

Special Situations - Condition Related (Documentation)			
			
<p>Close-ups of Old Labels (or what is left of them) As most readable</p>		<p>Close-ups of Old Labels As most readable</p>	
			
<p>Old Stabilization (Front) - Ferns - No ID As oriented for main "form"</p>		<p>Old Stabilization (Front) - Leaf - <i>Annularia</i> sp. As oriented for main "form"</p>	

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures
Specimen Orientations for Photography

Section 12

Special Situations – Repaired/Post Conservation (Documentation)



Cracked – *Annularia* sp.



Repaired with B-72 – *Annularia* sp.











With Paint Spot - Fern – No ID









Without paint spot – Fern – No ID

Specimen Orientations for Photography

Special Situations - Repaired/Post Conservation (Documentation)	
 <p>00008373</p>	 <p>00008373</p>
Old Repairs (Front) - Fruit - <i>Sparganium stygium</i> Heer	Old Repairs (Back) - "Repair"
 <p>00008373 00012047</p>	 <p>00008373 00012047</p>
Front - Fruit - <i>Sparganium stygium</i> Heer	Fruit - No ID
 <p>00012047</p>	 <p>00012047</p>
Front Left - Fruit - <i>Sparganium stygium</i> Heer	Back Left - No ID
 <p>00008373</p>	 <p>00008373</p>
Front Right - Fruit - <i>Sparganium stygium</i> Heer	Back Right - No ID

Paleobotany, Micropaleontology, & Mineralogy Collection Sam Noble Oklahoma Museum of Natural History Procedures

Specimen Orientations for Photography

Special Situations - Repaired/Post Conservation (Documentation)					
					
Old Repairs (Front) - Fern - No ID		Old Repairs (Back) - No Fossil			
					
Front - Fern - No ID		Back - Fern - No ID			
					
Front "New" - Fern - No ID		Back - Fern - No Fossil			