

Meeting Minutes are subject to Revision and Final Approval at the 2006 Annual Meeting

MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS Annual Meeting on March 8th, 2005 Augusta Elks Lodge

President Jim Logan opened the meeting at 9am with introductory remarks.

Secretary's Report: Chris Dorion gave the Secretary's Report for 2004. The report is attached at the end of the minutes. The 2004 Annual Meeting Minutes of MAPSS were moved to be accepted, the motion was seconded, and unanimously approved.

Treasurer's Report: Andrew Carpenter gave the 2004 Treasurer's Report. The report is attached at the end of the minutes. In summary, MAPSS has ~ \$2,600 on hand after paying for the 2005 Annual Meeting, (\$900), 2005 stipend (\$500), 2005 web site design (\$500), and 2005 Envirothon (\$250). Motion to accept report moved, seconded, passed unanimously.

MDEP/LURC Task Force Report: Darryl Brown reported. The Task Force was formed ca. 1992. Darryl Brown is the MAPSS representative. The Task Force is predominantly comprised of engineers. Overall, it was a quiet year. The new major focus is storm water regulation. There is new rule making that will require Legislative approval later this year. The regulations are moving away from detention basins toward infiltration. This will increase the need for high intensity soil surveys. The goal is to receive Legislative approval by June of 2005, and it will become law after 90 days. In summary, the Task Force reviewed all legislation affecting MDEP/LURC, and storm water was the primary issue that would affect MAPSS.

Vernal pools were also discussed along with their proposed new regulations as Wetlands of Special Significance which may take effect later this year.

Membership Report: Lee Burman reported that all membership data has been transferred to Andrew Carpenter. For 2004, MAPSS had 48 full members and 18 associate members. 57 renewal postcards were sent out and most were answered. Dave Rocque provided Lee with a list of M.C.S.S. She invited all who were not members of MAPSS to join and 4 accepted the invitation. Students were invited to join as associate members and 5 new ones joined.

The Membership Chair is responsible for increasing or maintaining members, while dues go to the Treasurer who keeps the data base current.

Discussion: There is a challenge of staffing the Executive Committee (E.C.) with fresh members out of only 48 full members. Getting "new blood" into the organization will be a challenge.

Lee Burman is stepping down and there is a need for a new Membership Chair.

Smithsonian Update: Don Phillips gave the report for the committee which consists of himself, Chuck Lyman, and Johanna Szillery. As of March 8th, MASE has committed \$1,000, MAWS \$500, and \$575 has

been received from individuals. The goal is to gather \$10,000 so that the Chesuncook Soil Monolith can be permanently displayed at the Smithsonian Museum in Washington, D.C. in the upcoming soils exhibit.

Education Committee Report: Don Phillips reported on the Janet Cormier Scholarship Fund. He needs two volunteers to help in evaluating applications. Dave Marceau, Andrew Carpenter, Corinne Leary, Bonnie Stewart, and Darryl Brown volunteered. The two winners will be announced in the June issue of *THE LAY OF THE LAND*.

UMO Update: Johanna Szillery reported for Ivan Fernandez. The notes are attached at the conclusion of the minutes.

Discussion: There were questions raised about students becoming associate members. There are ~ 20 undergraduate soils students and ~ 7 Masters degree students, which is fewer than 30 years ago. Today's program is changed from that of 30 years ago. It seems students are pursuing a more interdisciplinary course of studies, for example entitled "Ecology and Environmental Science", which includes wildlife studies.

New England Hydric Soil Technical Committee Report: Joe Noel was not present. Dave Rocque gave the following report:

My report for Joe Noel on the NEHSTC included the DownEast Field Trip and a discussion of our (NEHSTC) only meeting since the last MAPSS Annual meeting. That meeting discussed last years fall tour which looked at vernal pool soils in Rhode Island. Issues brought forward included:

1. Difficulty distinguishing mineral from organic surface soil horizons in wet soils
2. Differentiating ortstein development from podzolization
3. The concept of Nodules as redoximorphic features and whether or not an ortstein is a nodule
4. Data collected seems to indicate that in wet sandy spodosols, the application of the indicators results in a false negative (this was seen at the MAPSS workshop last summer in Scarborough). Thoughts by the committee included allowing ortstein as an indicator, defining color and thickness of a Bh as part of an indicator, and allowing a stripped appearance as a stand alone wetness feature.

The committee is considering whether the problem of false negatives with wet sandy spodosols can be fixed with modifying an existing indicator or if a new indicator needs to be developed.

Steve Hundley noted very thick (12 to 15 inches) albic horizons in southern New England that have been recognized as Bg or Cg horizons. There is a need to investigate deeper than 15 inches; a Bhsm can be found below this depth. In this situation, the *FIELD INDICATORS* keys cannot be used and professional judgment should be employed.

MAPSS Web Site: Chris Dorion gave the report. He reported that \$500 was raised from last summer's Hydric Sandy Soil workshop in Scarborough toward overhauling the website. Seth Mercier from KenBrio offered to design the new site as part of their company's *pro bono* work for a non-profit organization. The committee consists of Laura Suomi-Lecker, Chris Dorion, Dave Turcotte, and Ted Butler. Anyone with ideas, web sites they like, links, photos, or other suitable materials is encouraged to help out.

The new web site will contain an index page linked to Membership data, application, recent papers/publications, photo galleries, soil profiles, landscapes, and other soil resources. The new 2004 MAPSS Guidelines will be on-line also.

NRCS Update: Wayne Hoar reported that they have hired 5 new people. They are working on the southern Penobscot County survey. The Hancock/Washington Counties survey is close to completion. Western Aroostook County survey will be started full-time this coming field season.

There is one GS-9 soil scientist position open in Presque Isle office. They are hiring 3 temporary soil scientists this year.

Wayne Hoar presented 2 maps, one showing the status of on-going soil surveys and the other showing the availability of digital soils data..

Southern Piscataquis County soil survey will be on a CD soon.

The National Review was held last May, and the Maine NRCS needs to increase their technology usage. Toward this end, they are now training with ARC GIS, 3D Mapper, and Ortho Mapper software. This gives them the ability to digitize in the field and also to scan field maps.

There are 10 to 12 water table studies with data loggers for water level and temperature at present.

Discussion: Students are graduating with less than 15 hours of soils classes and taxonomy/soil morphology. Can MAPSS help with this?

Discussion: There is at present no formal agreement between MAPSS, NRCS, Maine Department of Agriculture, and the University of Maine Forest Experiment Station (FRES) to work together. Wayne Hoar suggested that for MAPSS to join this group, he would draft a new agreement so that MAPSS could become part of the Cooperative Agreement. One person from MAPSS would then be invited to all the Cooperative workshops during the year, such as Annual Reviews. MAPSS sponsored workshops would be part of this Cooperative Agreement.

Motion: Daryl Brown moved to proceed with Wayne Hoar's suggestion to draft a new Cooperative Agreement which would include one full member and several alternate members from MAPSS to join the National Cooperative Soil Survey for one year. The agreement can be easily terminated if it doesn't work out.

The motion was seconded and unanimously approved.

Morning Coffee Break

Election of Officers: Norma Kalloch, Nominating Committee Chair, presented the slate of officers:

President: Laura Suomi-Lecker

Vice President: Chris Dorion

Treasurer: Andrew Carpenter

Secretary: Dave Turcotte

Director: Daryl Brown

Additional nominations were solicited from the floor. Receiving none, it was moved to accept the slate as presented. Motion was seconded and unanimously passed by the membership.

Don Phillips volunteered to continue as Education Committee Chair.

The Membership Committee Chair was _____

New Discussion for Membership: Dave Rocque presented proposed revisions to the **2004 MAPSS Guidelines**.

Discussion of High Intensity Soil Survey definition: The basis for this discussion was that there is some confusion by the public, town officials, and even regulators as to what exactly a high intensity soil survey is. MAPSS Class A and Class B soil surveys are examples but not the only soil surveys that can provide site specific detail.

A long discussion ensued, revolving around whether to add "...for a particular land use." It was noted that this is the first time a high intensity soil survey (HISS) has been defined. It was noted that the proposed definition is slightly different from that proposed that appeared in the winter edition of the *Lay of the Land* newsletter. A motion to accept the following definition was put forward: "A soil survey that provides sufficient detail to make site specific decisions." Motion was seconded, vote showed two members opposed and the remaining in favor. Motion carried.

It was also noted that MAPSS needs to meet with MDEP to educate their resource specialists regarding Class A, B, and C soil surveys and when each one is appropriate. The categories are fine, but guidance is needed on when to require each one.

Discussion of proposed revision to Class A soil survey: The basis for this discussion is the present requirement for location under the direction of a registered land surveyor or qualified professional engineer was developed before GPS was available. In addition, it is possible for a Class A soil survey to be conducted on a small urban lot with good ground control for swing ties or other accurate measurements that do not require location by survey instruments. The only question is do we want to define what is meant by "accurate" such as to the sub-meter level?

Daryl Brown moved the following definition: "Ground control base line and test pits for which detailed data is recorded are located to sub-meter accuracy under the direction of a qualified professional." The motion was seconded and passed by the membership.

Joint MASE/MAPSS Workshop: For 2005, it looks to be the last week in August (30th-31st). They are looking for a site with 3 parent materials – glaciofluvial, glacial outwash, marine sediments, and glacial till. A suggestion was made to add a workshop component on line placement accuracy. Anyone with a potential workshop site should contact Dave Roque at 287-2666 as soon as possible.

Draft Agenda for Downeast Trip: Dave Roque handed out an agenda for a soils trip Downeast in September. This is attached following the minutes. It will follow by one week the NEHSTC tour of problem soils. Early registration and room reservations are advised as there are few motels in the area.

Motion: For MAPSS to sponsor this workshop from September 20th-22nd, to cost \$35 for members and \$50 for non-members. Motion seconded. Discussion: This workshop will be mailed out to MAWS and MASE memberships as well. Motion passed unanimously.

Environment Fund: Moved to approve \$250, seconded, passed unanimously.

Agricultural Trade Show: Discussion of whether MAPSS should continue to have a presence at this venue. Other venues were discussed such as Maine Municipal Association, Maine Association of Planners, Common Ground Fair, and others. It was decided to let the incoming E.C. make the decision.

MAPSS Scholarship: It was moved to give \$500 to the Janet Cormier Fund to be awarded to the best proposal; motion seconded and passed unanimously.

Smithsonian Fund: MAPSS has ~\$2,400 in its treasury at present. Dave Marceau moved to approve \$1,000 toward the Smithsonian Fund so that the Chesuncook Soil Monolith could be permanently displayed. Motion seconded and passed unanimously.

MAPSS brochure: Dave Turcotte spoke and moved that MAPSS produce a new, high quality, color, professional brochure for MAPSS. Cost would be ~\$670 for 1,000. It was moved to approve up to \$700

to be used for this brochure, and that Dave Turcotte will volunteer to lay it out and walk it through the printing process. Motion seconded. Discussion followed.

An amendment to Dave Turcotte's motion was moved. The amendment changed the amount to \$750 and that the Executive Committee would approve final design. The amendment was seconded and passed.

The main motion was then voted; it passed with two opposed.

Sid Pilgrim's Lecture: Sid Pilgrim presented results from Karen Dudley's M.S. thesis on wet spodosols. Albic horizons in WD and PD classes were compared. Under Indicator IX A, only 2% RMFs needed in E to key out. Point of measurement is top of mineral unless O-horizon is greater than 8 inches thick. Look in the glossary under "surface" to find this situation.

Stripped matrix – some sand grains are stripped in the albic and are white; others are not and have a gray color (usually organic coatings). This stripped matrix is more common in southern New England. "Stripped matrix" basically replaced "organic streaking". Probably not present in northern New England. Albic mapping in 3D soil pits was conducted, describing the map view of each horizon and the profile view to gain an understanding of the 3D shape of this "stripped matrix".

Values of 6 and 7: white color. Values of 4 and 5: gray color. Values of 3 and 2: black color. There are 4 recent or soon-to-be-published articles on wet spodosols coming out in *Soil Survey Horizons*. Color by itself is not a good indicator of wetness; you need to take into consideration the forest floor thickness (greater is wetter) and the thickness of the E-horizon (greater is wetter).

Try scraping down a small horizontal area (map view) and measure the white v. gray v. black colors. This is 90 degrees opposed to how we normally examine soil pits (from the side walls).

Indicator IX B fits northern New England well, but always use professional judgment as needed.

Wayne Honeycutt's Lecture: The focus is on sustainable cropping systems. *Brassica* genus (mustards, canola) are used for pest control because upon decomposition, isothiocyanate is produced naturally, discouraging pests. Water use is still a lot of guesswork by farmers. He noted early on that he thought that historical potato declines in the NE (relative to the rest of the country) were a function of inefficient use of irrigation water. Efficient use of manure nutrients is important. In organic matter tests, 1 to 3% of the test result is just microbial activity.

Johanna Szillery and Jessica Sherman Lecture: Lectured on metal leaching at the Bear Brook Experimental Watershed Manipulation site. As one of the watersheds was acidified, metals such as calcium became mobile and were lost through the system. Below pH of 4.8, aluminum was released; below pH of 3.8, iron was lost. Forest stand type (hardwood v. softwood) had a major influence on this process.

Outgoing President Jim Logan adjourned the meeting at 3pm as a snowstorm was winding up outdoors.

30MARCH2005

Respectfully Submitted by Christopher C. Dorion
MAPSS Secretary 2002-2004.

SECRETARY'S REPORT 2004

Christopher C. Dorion, Secretary

MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS

ANNUAL MEETING NOTICE: Was included with the winter edition (Volume 9, Issue 2) of **The Lay of the Land**, mailed on or about February 10th, 2004 to all members.

QUORUM: 1/3 of full members or 25 members, which ever is smaller.

SECRETARY'S RESPONSIBILITIES: Keep a written record of each meeting and send copies of the minutes to all the Association members.

The 2004 Annual meeting minutes of March 2nd, 2004 are available for inspection.

Executive Committee meeting minutes of:

- *January 20th, 2004*
- *April 1st, 2004*
- *May 24th, 2004*
- *December 16th, 2004*

are available for inspection. (With the new website, E.C. meeting minutes will be posted after formal approval).

MAPSS SPONSORED FIELD MEETINGS: MAPSS sponsored or co-sponsored three workshops during the year.

- January 26th, 2004 – DEP/LURC/SPO soil survey workshop in Augusta, Maine
- July 29th, 2004 – Hydric sandy soils workshop in Scarborough, Maine
- September 15th, 2004 – Joint MASE/MAPSS soil taxonomy and pedology workshop in Corinth, Maine

University of Maine, Department of Plant, Soil, and Environmental Sciences update, from Ivan Fernandez, reported by Johanna Szillery

- PSE hired a new faculty in horticulture. New hire is Stephanie Burnett, Assistant Professor of Horticulture. 60%teaching and 40%research. Areas of emphasis are ornamental herbaceous plants and greenhouse production. She will arrive in July

2005. Her M.S. is from Auburn, 2000, and Ph.D. is from Univ. of Georgia, 2004.

- Some of the newer faculty who have recently been tenured are beginning their turns at sabbatical and will be traveling to the corners of the planet in the next few years as they bring back new insights and knowledge. Stay tuned!

- Areas of activity in research to include forest soils, wetland soils, soils in sustainable agriculture, and submerged soils all are active in the department.

- As discussed today, major new funding from the National Science Foundation for Bear Brook and watershed/soil research at Acadia, in West Virginia, and in Europe will keep those programs quite active over the next few years.

- The department is in the process of selecting a new chair person for next year as Sue Erich completes her term in July, 2005. Greg Porter is the likely successor to the throne, although the process is ongoing at this time.

PRELIMINARY

MAPSS Treasury Report

21-Mar-05

MAPSS Checking Account as of 12/11/04	\$2,514.59	
<i>Income</i>		
2005 Dues (full membership)	\$875.00	35 full members at \$25.00 each
2005 Dues (associate membership)	\$210.00	14 associate members at \$15.00 each
2005 Conference Registration	\$1,315.00	44 registrants at \$30.00 each*
<i>Expenses</i>		
2005 Conference Costs	-\$986.92	to the Elks Club
Reimbursements to members for expenses	-\$394.60	for stamps, copying, mailings, newsletter, etc.
Total in MAPSS Account at the end of March 2005	\$3,533.07	
<i>Anticipated income</i>		
2005 Dues (full membership)	\$725.00	13 full members at \$25.00 each
2005 Dues (associate membership)	\$90.00	6 associate members at \$15.00 each
Downeast Hydric Soils Tour	\$1,000.00	14 registrants at \$25.00 each
<i>Anticipated expenses</i>		
Smithsonian contribution	\$1,000.00	
MAPSS Website work	-\$500.00	
Janet Cormier Scholarship	-\$500.00	
Envirothon	-\$250.00	
MAPSS Brochure	-\$750.00	
Reimbursements to members for expenses	-\$600.00	
Anticipated Total in MAPSS Account for December 2005	\$698.07	

* \$5.00 deduct for one registrant who brought their own lunch

2005 MAPSS DOWNEAST HYDRIC SOIL TOUR

REGISTRATION

MAPSS is sponsoring a Hydric Soil Tour in Washington County, Maine September 20, 21, and 22, 2005. We will be visiting sites seen the week before by the Technical Committee for the Field Indicators for Identifying Hydric Soils in New England and will be able to share those participants insights. Don't miss this unique opportunity to combine site seeing with technical development. The agenda is attached. On Wednesday, September 20, there will be a lobster/clam bake after we are finished with the last site of the day at Cobscook Bay State Park. The bake will be put on by friends at the

Washington County Soil and Water Conservation District and will consist of the following:

2 "Bugs" a person (that's Lobsters) / steamed clams / soda-water-juice or BYO / chips / blueberry cream pie
(If someone doesn't want lobster, there will be dogs and burgers)

The cost of the workshop is \$35.00 for members and \$50.00 for non-members plus \$25.00 for the lobster bake. Please send your checks, payable to MAPSS, to:

Andrew Carpenter
P.O. Box 361
Belfast, Maine 04915

In order to help the SWCD in ordering food, they need to know just how many will be participating in the bake. Please indicate below if you will be partaking of the bake.

Registration for MAPSS 2005 Downeast Historic Soils Tour and Lobster Bake
At Cobscook Bay State Park

Name:

Address:

Phone Number: _____ **Email:**

Number Attending Site Reviews: _____ **X \$35.00 or \$50.00 =**

Number Attending Bake: _____ **X \$25.00 =** _____ **Total Enclosed**

Number Attending Blueberry Barrens Tour (no extra charge)

P.S. – Rooms to rent are limited in the Machias area so we suggest reserving one as early as possible. The instructors will be staying at the Bluebird Motel so that will be the take-off point.

MAPSS DOWNEAST HYDRIC SOILS TOUR

Some of you may remember MAPSS hosted a problem hydric soils tour in the Rangeley, Maine area a few years ago. After a year long delay due to a hurricane the tour visited several sites that were part of a tour for the committee who developed the Field Indicators for Hydric Soils in New England. Well, Maine is again hosting the Field Indicators Committee only this year the tour will be in Downeast Maine. Sites include a folist (non-saturated organic soil) and histosol (saturated organic soil) at West Quoddy Head State Park which are separated by about 25 feet, a poorly drained marine sediment that has a high chroma matrix due to erosion from neighboring red parent material shallow to bedrock sandy loam glacial till soils, dark colored sand dune soils located at Roque Bluff State Park between a freshwater pond and the ocean and a shallow to bedrock aquod (saturated loamy sand glacial till soil with an A horizon and dark colored B horizon) with a thick O horizon. The tour will start out on September 20 with an afternoon visit to the famous blueberry barrens, which have unique geology and soils, for those interested, and then move to the soil sites the next two days. A lobster/clam bake is being thrown in for good measure at the end of the day on September 21. The tour ends in Jonesboro on September 22 around noon for a reasonable departure time unless you want to stay and enjoy the downeast area for a few more days. Cost of the tour is \$35.00 for MAPSS members and \$50.00 for non-members, per person. Add \$25.00 if you want to participate in the lobster/clam bake. This is an excellent opportunity to sharpen your skills at determining hydric soils in some challenging and very scenic locations and at a relatively pest free and warm time of year. You will also benefit from the combined experience of some of the best soil scientist minds in New England who will view the sites the week before.

2005 MAPSS HYDRIC TOUR DOWNEAST

Tuesday (9/20): Depart [Bluebird Motel](#) in Machias @ 1:00pm - Take Blueberry Barrens tour.

(Unique glaciofluvial/Marine delta landscape - with Geologist overview)

Return to motel around 5:00PM.

Wednesday (9/21): Leave Bluebird Motel at 7:30 AM. (Try to have your lunch with you, but we will stop at a store prior to stop 2)

Site 1: Passamaquoddy Tribal Land - Creasey soil (developed from red sandstone) and poorly drained glaciomarine sediments with chroma 4/5 matrix in B horizon and 3 chroma in C horizon, due to influence of upslope Creasey soils (8:30 - 10:30)

Site 2: West Quoddy Head State Park - Histosols and Folists in close proximity to one another followed by Lunch @ Quoddy with prospects of whale watching.

LOBSTER BAKE - [Cobscook Bay State Park](#) - after Site 2 (around 4:00PM)

Thursday (9/22): Leave Bluebird Motel at 7:30 AM.

Site 1: Roque Bluffs State Park - Machias (8 - 10 AM)
Beach / Dune sandy sites with thick dark surface underlain by sands with identification of redox difficult.

Site 2: Jonesboro Patten site: (10 - end)
Very Shallow/moderately deep Folists (O, E, R horizonation) and Spodosols with ortstein.

**** Group will head home after Jonesboro site or stay and enjoy Downeast for the weekend ****

INFORMATIONAL WEB SITES

Washington County info:

<http://www.mainerec.com/wc.asp?Category=131&PageNum=131>

Quoddy State Park and link to other State Parks:

http://www.state.me.us/cgi-bin/doc/parks/find_one_name.pl?park_id=10

Machias, Maine Chamber of Commerce (motels, activities, businesses etc.)

<http://www.machiaschamber.org/>

The Bluebird Motel:

<http://www.ohwy.com/me/b/blbdmoma.htm>

The Riverside Inn in East Machias, Maine:

<http://www.riversideinn-maine.com/>

Passamaquoddy Tribe info and links:

<http://www.native-languages.org/passamaquoddy.htm#tribe>

PRELIMINARY