

**REGIONAL SCHOOL UNIT NO. 38
BOARD OF DIRECTORS
Maranacook Community High School
April 10, 2018, 6:00 p.m.
(please note earlier start time)**

AGENDA

1. Call to order:
2. Citizens' Comments: (5 min.)
3. Additions/Adjustments to the Agenda by Board and/or Superintendent: (5 min.)
4. Action/Discussion/Informational Items: (15 min.)
 - a. Approval of Minutes of April 4, 2018*
 - b. Acceptance of resignation effective June 30, 2018 – Barbara Bourgoine, Literacy Coach
 - c. Acceptance of donations – Hannaford Helps to MES, \$435.00
 - d. Consideration of overnight trip – Project Graduation, June 9, 10, 2018*
 - e. Consideration of overnight trip – Baxter State Park, Middle School Grade 8 Advisee Day Out, June 14 – 16, 2018*
 - f. Consideration of overnight trip – Acadia Schoodic Point, Middle School Grades 6-8, May 30 – June , 2018*
5. Budget Workshop (45 min.)
 - a. Updates
 - b. Deliberations, follow-up and decision making
 - c. Vote on 2018-2019 RSU 38 Budget*
 - d. Vote on 2018-2019 RSU 38 Adult Education Budget*
6. Executive Session to discuss employment of officials/appointees/employees, pursuant to 1 M.R.S.A. § 405(6)(A)
7. Action following Executive Session (if any)
8. Adjournment:

* Attachments

REGIONAL SCHOOL UNIT #38 BOARD OF DIRECTORS
Maranacook Community High School
March 28, 2018
Minutes of Meeting

Members Present: Chair Betty Morrell, Vice Chair Gary Carr, Wendy Brotherlin, Cathy Jacobs, Jeremy Payne, Kaleb Pushard, Shawn Roderick, Lucas Rumler, David Twitchell, Adam Woodford (arrived 6:38), Alexander Wright

Members Absent: Melissa O'Neal, Thomas Sneed

Administrators: Superintendent Donna Wolfrom, Principals Jeff Boston, Dwayne Conway, Janet Delmar and Rick Hogan, Assistant Principal Kristen Levesque, Special Education Director Ryan Meserve, Technology Director Diane MacGregor, Finance Manager Brigette Williams, Director of Curriculum, Instruction, and Assessment Nancy Harriman

1. Call to order: Chair Morrell called the meeting to order at 6:30 p.m.
2. Student Representatives' Reports
Middle School Student representatives Naeema O'Rourke and Thomas Struck reported that the Boys' and Girls' Alpine Ski teams were awarded state champions in February. They also reported on the projects of the individual classroom teams. Principal Hogan added that Naeema O'Rourke will be representing Maranacook Middle School at the Geo Bee finals at Farmington.
3. Report from Auditor
Auditor Bill Hall reported on the RSU #38 financial audit for the year ending June 30, 2017. He reported that the books for RSU #38 are very well maintained and that Finance Manager Williams does a very good job with the federal reporting, adding that he considers Mrs. Williams one of the top business managers in the State. He invited the Board to contact him with questions regarding the Audit. The audit is posted on the RSU #38 website.
4. MELMAC Presentation
Wendy Ault, Executive Director of MELMAC presented to the Board on Maranacook's MELMAC Grant. Her presentation included an overview of the history of the grant and statistics relating to Maranacook students compared to State of Maine and national statistics.
5. Additions/Adjustments to the Agenda by Board and/or Superintendent: none
6. Citizens' Comments: none
7. Action/Discussion/Informational Items:
 - a. Approval of Minutes of March 28, 2018
D.Twitchell noted that the vote to not fund the uniforms on page 2 was incorrectly recorded; it should have read that Mr. Twitchell opposed the motion.
MOTION by Carr, second by Twitchell to approve the Minutes of March 28, 2018 as revised.
Motion Carried: unanimous
 - b. Consideration of out-of-state trip, MCHS College Tours, New Hampshire and Maine, April 26, 2018
MOTION by Carr, second by Roderick to approve the out-of-state trip for college tours to New Hampshire on April 26, 2018. **Motion Carried:** unanimous
 - c. Consideration of out-of-state trip, MCMS Gifted/Talented Art students, Boston Museum of Art, May 5, 2018

MOTION by Carr, second by Brotherlin to approve the out-of-state trip for the middle school Gifted/Talented Art students to the Boston Museum of Art on May 5, 2018.

Motion Carried: unanimous

d. Consideration of out-of-country trip, MCHS Paris, France, early December 2018

MOTION by Carr, second by Brotherlin to approve the out-of-country trip to Paris, France, in early December 2018 as presented.

Discussion ensued regarding the timing of the trip and the amount of class time students and teachers would miss, as well as the district's responsibility to hire substitutes while the teachers are away. Principal Conway addressed the concern about missed class time reporting that students will be responsible for making up all class work.

Motion Carried: 8 in favor, 2 opposed (Carr, Rumler), 1 abstained (Wright)

e. Policy Second Readings: BEDB, School Board Meetings and Agendas; IJJ, Instructional and Library-Media Materials Selection; JHB, Truancy; JJIF, Management of Concussions and Other Head Injuries; JLDBG, Reintegration of Students From Juvenile Correctional Facilities; JRA, Student Education Records and Information

Superintendent Wolfrom reported that the policies up for second reading consideration were reviewed by the Policy Committee at their last meeting. No additional comments or questions were submitted to the Policy Committee and no changes were made since the first readings.

BEDB, School Board Meetings and Agendas - **MOTION** by Carr, second by Jacobs to accept Policy BEDB as presented. **Motion Carried:** unanimous

IJJ, Instructional and Library-Media Materials Selection - **MOTION** by Carr, second by Jacobs to accept Policy IJJ as presented. **Motion Carried:** unanimous

JHB, Truancy - **MOTION** by Carr, second by Jacobs to accept Policy JHB as presented. **Motion Carried:** unanimous

JJIF, Management of Concussions and Other Head Injuries - **MOTION** by Carr, second by Jacobs to accept Policy JJIF as presented. **Motion Carried:** unanimous

JLDBG, Reintegration of Students From Juvenile Correctional Facilities - **MOTION** by Carr, second by Jacobs to accept Policy JLDBG as presented. **Motion Carried:** unanimous

JRA, Student Education Records and Information, **MOTION** by Carr, second by Jacobs to accept Policy JRA as presented. **Motion Carried:** unanimous

f. Policy First Readings: EBCE, School Closings and Cancellations; GCOA, Supervision and Evaluation of Professional Staff; IMDC, Observance of Religious Holidays; KI, Visitors to Schools

Superintendent Wolfrom reported that Policy EBCE is a new policy under consideration. Policy GCOA is being reviewed as part of the Policy Committee's process of reviewing older policies. Policy IMDC is being reviewed due to a recent request from a citizen to the Board requesting additional allowances for students being absent from school or activities due to religious beliefs. She also noted that the list of holidays that was provided will be an attachment to the Policy so that staff and coaches can refer to it prior to scheduling special classroom activities and events for the schools. Policy KI is also being reviewed as an older policy due for review.

Chair Morrell asked that any comments and/or questions regarding these policies be submitted to the Superintendent's Office for review at the next Policy Committee meeting.

g. Consideration of revised LAU Plan

Superintendent Wolfrom reported that each district is required by the state to submit a LAU Plan every 5 years that addresses meeting the needs of students with Limited English Proficiency. Diane Wadsworth, the District's ELL Teacher has reviewed the plan and made recommended changes and updates. Superintendent Wolfrom recommended approval of the RSU #38 LAU Plan as submitted.

MOTION by Carr, second by Jacobs to approve the LAU Plan as submitted.

Discussion followed.

Motion Carried: unanimous

h. Consideration of Interlocal Agreement for the Kennebec Valley Student Supports Regional Service Center

Superintendent Wolfrom reported that she has been working with Superintendents Gary Rosenthal and Bill Zima, and the DOE appointed facilitator Mike Cormier to complete Part II of the Regional Service Plan that was included in the board packet. The name of the regional service center would be Kennebec Valley Student Supports Regional Service Center. For the first several years, the service center would be managed by the Superintendents on a two year rotating basis. The three superintendents will comprise the Board of Directors and all decisions will be made by the Board. Services provided by the center would include a summer school program for credit recovery and standards proficiency, a joint program of co- and extra-curricular activities, a joint professional development program, and a joint program for recruiting, training, and retaining substitute teachers. Members may decide to discontinue purchasing services from the center, and with a 90-day notice they may discontinue their membership fee. Membership fees will be based on the number of students in each district at the rate of \$5.00/per student. There is also a withdrawal clause for districts that no longer wish to participate, and there is a dissolution clause.

RSU #38 received an additional \$16,700 in state subsidy for the submission of Part I of the application for this service center. Should the plan be approved, the service center will receive \$97,200 in state subsidy for FY19. The deadline for submission of the plan is April 15.

The RSU #38 Board needs to vote approval of the Part II application, then the citizens will be asked to vote on a warrant article supporting the agreement at the Annual meeting. The Plan also needs DOE approval. The motion for the Board to consider is in the folders.

MOTION by Carr, I move to approve the Interlocal Agreement for the Kennebec Valley Student Supports Regional Service Center in the form presented to this meeting, to authorize the Chair to sign the Interlocal Agreement on behalf of the RSU #38 School Board, and to authorize submission of the Interlocal Agreement to the Commissioner of the Department of Education for Approval. Second by Twitchell.

Discussion followed. In terms of paying administration, the 3 superintendents decided that they would oversee the program on a rotating 2 year basis at no additional charge.

Question was asked regarding what students and tax payers are actually getting. Superintendent Wolfrom replied that right now we don't have a summer school program for credit and standards proficiency. This would afford us to set up a summer school with certified teachers for credit recover and standards recovery. In terms of extra-curricular – if some of our students want to attend a program at one of the other districts that we do not provide, it would provide transportation. Right now we are all struggling for qualified substitutes. This would provide one system that all 3 districts would be part of, hopefully saving all of the district money. There are still a lot of things to work out, but the superintendents believe it will be a good opportunity for all students.

Motion Carried: unanimous

8. Budget:

Superintendent Wolfrom provided the following updates since the last meeting:

- We received notice regarding health insurance – the increase is 4.85% which reduces the draft budget by an additional \$43,016.
- The Superintendent, Finance Manager and Facilities Director met and moved more item to purchase this year or complete this year in order to reduce the proposed budget. Changes reflected are on pages 9, 10, 11, and 12 of the budget handout.
- Last week the Board voted to eliminate the \$10,600 for athletic uniforms.

All these changes are reflected in the Version 4 Summary Budget.

Superintendent Wolfrom added that the Facilities Committee met with the Architect regarding the needs assessment report. The projects slated for the bond include: district paving, including Millard Harrison Drive; MES heating; ventilation projects in some of the schools; WES septic and boiler;

high school roof; and ADA accessible bathroom at MES. Possible revolving renovation projects might include: replacing locksets throughout the district; exterior security card swipe system; and updating fire alarm systems. Possible projects that may be addressed through Efficiency Maine include updating lighting systems throughout the district. Based on the discussions there is not anything that can be removed from the FY19 proposed budget.

At this point, Version 4 of the FY19 draft budget represents a 4.49% increase over FY18, for a total of \$17,985,749.45.

Superintendent Wolfrom asked Principal Conway to talk about the needs for the ET II and Social Studies teacher at the high school.

Principal Conway reported that the additional Social Studies teacher request is a matter of credit requirements. The high school currently has 4 teachers with full time schedules; one teacher already teacher a half-credit course above the maximum requirement, by choice. Benefits include manageable classes, financial literacy class, and without this position many classes would be above 25 students; and we may not be able to offer some of the electives. Discussion ensued regarding rearranging some of the classes to include financial literacy and the research credit, and possibly integrate more Social Studies into English Language Arts.

A.Wright asked about the air compressor for the high school IA program that was discussed last week. Superintendent Wolfrom reviewed the process for staff to take if they have any needs to be addressed during the budgeting process. Principal Conway did follow up with Mr. Stockford and the item has either been ordered or will be ordered.

Principal Conway reviewed the request for the ed tech position to cover study halls. The most cost effective way to provide this is to free up teachers who are covering study halls so they can work with students directly. At any given period there are students who need intervention. Teachers who would be available, would meet with students from their study hall. Schedule wise, this may not always work, but the high school believes it should work most of the time.

Principals Janet Delmar and Jeff Boston spoke about the needs and benefits of adding an elementary principal. They spoke about the percentage of time they are assigned to each school and the reality of being an administrator of 2 schools. They are responsible for the supervision/evaluation of all staff in both schools and part of that job is professional development as well (staff meetings, instructional leader). Issues that come up when they are not in the building falls on the lead teachers, which takes the teachers out of the classroom. Also the guidance counselors, nurses and specialists are all in the buildings part time. A lot of time is spent on the building culture in the buildings, but it is very difficult to do that when they are not there; it is difficult to be an educational leader when you are in a building 6 days a month. Adding another administrator would help to address a lot of the issues pertaining to discipline, building culture, professional development, educational leadership, etc. It would provide a full time principal for Manchester and Readfield Elementary Schools, and both Mt. Vernon and Wayne Elementary Schools would share a principal, but the amount of time in each building would be more than they currently have.

The Board discussed the benefits of keeping teachers in the classroom and having administration address other issues more quickly. It was noted that having a district with 4 separate elementary schools does come at a price and it is important that voters acknowledge that. This is a cost because citizens did not want to pursue looking at a central elementary school for all 4 communities.

Chair Morrell asked for the board members' thoughts on the draft budget as it stands.

C.Jacobs noted that she spoke with the Mt. Vernon Select Board members and they believe the schools are close to the tipping point with voters. She asked if it's time to reconsider pay for play for athletics as a way to get the budget down a little more.

Finance Manager Williams reported that the sports fees brought in around \$45,000 the last year they were in place.

Further discussion ensued about the new positions being requested. The administrators and teachers were applauded in their work to try to contain costs.

Question - what did the activity fee actually pay for? B.Williams responded it helped to offset co- and extra-curricular costs; it showed as an additional revenue.

Could it be used toward uniforms? B.Williams responded it is recorded as an additional revenue source, the uniforms would be listed on the expense side of the budget, so the two would negate each other.

The last year activity fees were in place they were \$75.00 per activity for high school and \$50.00 per activity for middle school. It did include some co-curricular.

MOTION by Payne to reinstate the activity fee, with a \$100 family cap, second by Twitchell.

Discussion ensued. B.Williams noted that with a \$100 cap for families, this would not bring in anywhere near the \$45,000 the previous fees brought in.

MOTION by Payne to withdraw his motion, second by Carr. **Motion Carried:** unanimous

The previous motion to reinstate the activity fee with a \$100 cap per family was withdrawn.

Discussion about the tennis courts. S.Drinkwater reported on the conditions of the tennis courts and his concern about waiting for the bond project to resurface the courts.

Discussion regarding the truck and mule. It was noted that instead of purchasing these two pieces of equipment outright that the district could purchase them through a lease purchase agreement over three years. This would reduce these items to approximately \$16,000/year for 3 years.

Additional discussion about whether the high school ed tech position would provide the results needed if it was reduced to half time.

MOTION by Roderick to purchase the truck and mule in the facilities budget through the lease purchase option, second by Jacobs.

Discussion ensued. This would reduce the draft budget by roughly \$32,000.

Motion Carried: unanimous

The administrators will continue to review the requests and come back to the Board next week with a final recommendation to be voted on.

9. Informational Items: Administrators responded to questions.
10. Executive Session to discuss employment of officials/appointees/employees, pursuant to 1 M.R.S.A. § 405(6)(A)

MOTION by Carr, second by Wright to enter Executive Session to discuss employment of officials/appointees/employees, pursuant to 1 M.R.S.A. § 405(6)(A)

Motion Carried: unanimous

The Board entered Executive Session at 9:15 and returned to public session at 10:04.

11. Adjournment: **MOTION** and second to adjourn at 10:05.

Respectfully submitted,
Donna H. Wolfrom, Superintendent/Secretary
D. Foster, Recorder

Maranacook Area Schools – Field Trip Request Form

Please submit request to office at least 3 weeks prior to field trip

Out-of-State and/or Overnight Trips must be sent directly to the Superintendent for Board approval

Select One: _____ (for full definitions, please refer to Policy IJOA)

Field Trip – takes place during the school day and is organized and conducted by one or more RSU 38 employees as a means of accomplishing particular curricular objectives.

Competition Trip – related to an academic, artistic, athletic, or other student competition or performance that involves individual students or teams.

Other School-sponsored Trip – organized and conducted by one or more employees as a supplement to the curriculum, as a class social activity, or as an activity planned by a student club or organization.

Non-school-sponsored Travel – organized by employees, parents or others that is not an extension of the instructional program or school-sponsored activities and has not been approved as a school-sponsored trip.

School: MCHS Date of trip: 6/9 6/10 Destination: Project graduation

Departure time (from school): 7:00 AM Return time (to school): 5:00 AM

Bag lunches will be needed (please confirm with Food Service 1 week before trip)

Teacher: Dr. Conway Grade level(s): 12th grade

Number of students: 90 Number of chaperones: 10 Cost of activity: 0.000

Cost of transportation*: 910 Transportation paid by: Paid For by class of 2018
(if not paid by school, please include billing information including mailing address)

Paid By: _____
(School, Parent Association, specific student activity account, other)

Educational objectives: (Include description of activities, pre-trip activities, correlation with curriculum, concepts/skills learned, follow-up lessons.)
(Use back side or attach sheet for objectives if needed.)

Project graduation is the final school day for seniors and allows students and advisors to spend one last day together

Planned Stop(s): None

Sites(s) have been notified: Yes No (Including food establishments)

Notification of transportation needs made to Transportation Director: (Date) 4/3
(Final approval of transportation arrangements dependent upon availability of bus & driver)

Other Transportation arrangements have been made - please specify: None

Storm Date: _____

Dwight Conway Recommended Not Recommended _____ Date 4/3
Principal's Signature

*Cost of transportation based upon cost per mile as determined through budget process (driver, bus, gas, depreciation)

Copies: send electronically ONLY
1 copy to Transportation Director
1 copy to Food Service Director (if during lunch)

RSU #38

Maranacook Area Schools - Field Trip Request Form

Please submit request to office at least 3 weeks prior to field trip

4e.

Out-of-State and/or Overnight Trips must be sent directly to the Superintendent for Board approval

Select One: (for full definitions, please refer to Policy IJOA)

- Field Trip - takes place during the school day and is organized and conducted by one or more RSU 38 employees as a means of accomplishing particular curricular objectives.
- Competition Trip - related to an academic, artistic, athletic, or other student competition or performance that involves individual students or teams.
- Other School-sponsored Trip - organized and conducted by one or more employees as a supplement to the curriculum, as a class social activity, or as an activity planned by a student club or organization. *Advisee Day out*
- Non-school-sponsored Travel - organized by employees, parents or others that is not an extension of the instructional program or school-sponsored activities and has not been approved as a school-sponsored trip.

School: MCMS Date of trip: 6/15/18 Destination: Baxter State Park

Departure time (from school): 3:00pm 6/14 Return time (to school): 3:00pm 6/16

Bag lunches will be needed (please confirm with Food Service 1 week before trip)

Teacher: Richard Aspinall Grade level(s): 8

Number of students: 10 Number of chaperones: 4 Cost of activity: N/A

Cost of transportation*: _____ Transportation paid by: Adult Chaperones
(if not paid by school, please include billing information including mailing address)

Paid By: same
(School, Parent Association, specific student activity account, other)

Educational objectives: (Include description of activities, pre-trip activities, correlation with curriculum, concepts/skills learned, follow-up lessons.)
(Use back side or attach sheet for objectives if needed.)

Advisee Day out

Planned Stop(s): _____
Sites(s) have been notified: Yes No (Including food establishments)

Notification of transportation needs made to Transportation Director: (Date) N/A
(Final approval of transportation arrangements dependent upon availability of bus & driver)

Other Transportation arrangements have been made - please specify: Personal Vehicles

Storm Date: _____

[Signature]
Principal's Signature

Recommended Not Recommended

4/4/18
Date

*Cost of transportation based upon cost per mile as determined through budget process (driver, bus, gas, depreciation)

~~Copies: send electronically ONLY~~
1 copy to Transportation Director
1 copy to Food Service Director (if during lunch)

RSU #38

Maranacook Area Schools - Field Trip Request Form

Please submit request to office at least 3 weeks prior to field trip

Out-of-State and/or Overnight Trips must be sent directly to the Superintendent for Board approval

Select One: (for full definitions, please refer to Policy IJOA)

Field Trip - takes place during the school day and is organized and conducted by one or more RSU 38 employees as a means of accomplishing particular curricular objectives.

Competition Trip - related to an academic, artistic, athletic, or other student competition or performance that involves individual students or teams.

Other School-sponsored Trip - organized and conducted by one or more employees as a supplement to the curriculum, as a class social activity, or as an activity planned by a student club or organization.

Non-school-sponsored Travel - organized by employees, parents or others that is not an extension of the instructional program or school-sponsored activities and has not been approved as a school-sponsored trip.

School: MCM S Date of trip: ^{MAY 30} 31, June 1 Destination: Acadia ~~St~~ Schoodic Point

Departure time (from school): ^{MAY 30} 8:15 AM Return time (to school): June 1 4:00 PM

Bag lunches will be needed (please confirm with Food Service 1 week before trip)

Teacher: Holman, Grade level(s): 6-7-8

Number of students: 65 ish Number of chaperones: 4 Cost of activity: All covered ^{BY team}

Cost of transportation*: 1400 Transportation paid by: Friends of Acadia A.N.P.

Paid By: Acadia account + cost per student
(School, Parent Association, specific student activity account, other)

Educational objectives: (Include description of activities, pre-trip activities, correlation with curriculum, concepts/skills learned, follow-up lessons.)
(Use back side or attach sheet for objectives if needed.)

Team Building. Biology ~~St~~ Geology, Ocean Science, weather science
camping. Their S.E.A. Program is Excellent! See Attached

Planned Stop(s): NONE. Possible stop on ride home for ice cream.

Sites(s) have been notified: Yes No (Including food establishments)

Notification of transportation needs made to Transportation Director: (Date) March 20th
(Final approval of transportation arrangements dependent upon availability of bus & driver)

Other Transportation arrangements have been made - please specify: Parents driving with some students

Storm Date: None

Principal's Signature: [Signature] Recommended Not Recommended Date: 4/6/18

*Cost of transportation based upon cost per mile as determined through budget process (driver, bus, gas, depreciation)

Copies: send electronically ONLY
1 copy to Transportation Director
1 copy to Food Service Director (if during lunch)

Schoodic Education Adventure Program Options for 2016

Welcome Program Options

Frazer Point Welcome & Introduction

1hr-2hr as time permits, ¼ mile easy walk across fields and shoreline

The SEA experience typically begins with an introduction at the Frazer Point Picnic Area. Students become familiar with the diverse natural and cultural resources preserved within our National Parks and the park service mission. Children explore the difference between preserving resources, the conservative use of resources, and the balance of each between national parks and other types of public agencies. Students review the basic regional history and pre-history of coastal Maine as well as ecology basics, earth science principles, and basic map/compass and resource issues like invasive species, endangered species, pollution, and climate change. A campus welcome option is available for groups with abbreviated time schedules or in the case of severe weather.

SERC Campus Welcome Program

1hr-2hr as time permits

Students become familiar with the diverse natural and cultural resources preserved within our National Parks and the Park Service Mission. Children explore the difference between preserving resources, the conservative use of resources, and the balance of each between national parks and other types of public agencies. Students review the basic regional history and pre-history of coastal Maine as well as ecology basics, basic map/compass, and resource issues like invasive species, endangered species, pollution, and climate change.

Core Program Options (Daylight Programs)

Citizen Science Investigations

2hr - 3hr part classroom and part field study, depending on topic, field section could be exploring campus, hiking moderate trails, exploring forest ground cover, or investigating a wetland.

This program provides a look at current research projects within Acadia, examines the scientific method, data collection methods and actual field study. Topics center around climate study, phenology, wildlife monitoring (salamanders, limpets, song birds and insects), and plant monitoring (lichens, ash trees, pine trees).

Vocabulary: random sample, data collection, analysis, survey, ecosystem monitoring, inventory of species.

Digging Through the Layers of Time (Mock Archeology Dig)

2hr - 2.5hr classroom program

Developed for younger students (5th/ 6th), this classroom program highlights the importance of "position" in discovering and analyzing geographic and historical information and in telling the story of an archeological artifact. Students work in small teams to carefully excavate a mock archeological dig, mapping their assigned pit as they use a coordinate system to record where artifacts are uncovered. They examine the artifacts and interpret their use, ultimately sharing the information with the class through a presentation and exhibit. This program puts students' earth science knowledge, deductive reasoning skills, math and writing skills, and public speaking skills into practice as they discover and discuss relative dating and how evolving human habitation is evidenced over a chronological period.

Field Trip to Mount Desert Island (MDI)

Day long trip can accommodate a variety of ability levels, must provide your own bus.

For schools, not from the local area, we offer a guided field trip to MDI. Permits and passes must be arranged in advance. Curriculum options can cover a range of topics including: history, geology, natural resource issues,

and more.

Forest Diversity Hike (Tree ID & Forest Measurements)

2hr – 3hr moderate hike along woodland and shoreline trails, 1 – 1 ½ miles in length.

The Habitat Hike offers students the opportunity to become familiar with a wide range of ecological community changes and methods for examining (measuring) those changes. Utilizing many of the same techniques and tools used by researchers, the skills students learn on the Habitat Hike will be reinforced throughout the program. Students will: learn how to use a dichotomous key to identify trees and learn the different parts of the forest structure (ground cover, under story, and canopy); learn how to determine position via topographical maps; plot data collection sites; record observations; participate in student “research teams” using basic tools to investigate percent cover and measure understory; learn Leave No Trace hiking techniques; and review habitat components.

Forest Succession & GPS Mapping

2hr – 2.5hrs part classroom and part ½ mile campus walk

This is an active program that puts technology in the students’ hands. Students study landscape succession from bare bedrock to maturing forest as they plot examples of forest succession. Through the use of interactive games, maps, and diagrams, students learn to navigate with a GPS unit and produce digital maps.

Geology Hike

2hr - 3hr moderate 1 mile hike.

This hike focuses on basic geology content while exploring excellent examples in the field. Concepts include: the rock cycle, deposition and erosion, sorting by wave energy, shoreline processes and glaciation. Vocabulary/ concepts: rock cycle, sedimentary, metamorphic, igneous, volcanic, intrusive magma, extrusive igneous rock, glacier, glacial erratic, moraine, till, concentric gouge, glacial polish, striation, mineral, shoreline processes, sorting by wave energy, sea arch, sea cave, clay – boulder scale (sediment sizes), Stoss and lee topography.

Marine Chemistry

2hr – 2.5hr classroom program with flexibility to go on a moderate hike to the ocean

The program begins with an overview of watersheds and the water cycle. Students conduct basic chemistry tests for salinity, clarity, dissolved oxygen, pH, and assorted nutrient loading while investigating the properties of water. Students experiment with salinity and density to determine how these factors affect the currents in the Gulf of Maine.

Vocabulary: evaporation, condensation, precipitation, percolation, transpiration, ground water, watershed, pH, turbidity, dissolved oxygen, nitrogen, phosphate, indicator, algae bloom, salinity, density, mass, volume, cycle, lake overturn, upwelling, current, estuary, gulf.

ME-1: Marine Ecology - Basic

2hr – 2.5hr moderate ½ mile walk to the tide pools (low tide dependent)

Students investigate marine life found in upper and mid-level tidepools while learning about concepts of food webs, predator/ prey relationships, adaptations, and the factors that create tides.

Vocabulary: niche, inter-tidal, tide, full moon, new moon, waxing, waning, rotation, revolve, orbit, gravity, latitude, equator, behavioral vs physical adaptation, predator, prey, community, competition, habitat, zonation.

ME-2: Marine Ecology with Population Study

2hr – 3hr moderate ½ mile walk to the tide pools (low tide dependent)

Students examine the diverse population trends of the upper and mid-shoreline as they estimate the populations of several benthic species, in crevasses, and at varying depths below the high tide line. Students learn how to identify several basic marine organisms and then as a group randomly survey the distribution of each species in the inter-tidal zone. Students, record observations pertaining to each plot, and discuss conditions and

ations that may affect which species thrives where. Students learn about the factors that create tides. Data can be used by the teacher back at school, to graph the differences found at each depth. Additional exercises include taking photo plot surveys and comparing field data to digital photo data counted by different groups.

Vocabulary: niche, inter-tidal, tide, full moon, new moon, waxing, waning, rotation, revolve, orbit, gravity, latitude, equator, behavioral vs physical adaptation, predator, prey, community, competition, habitat, population, random sample, meter, decimeter, transect, quadrant, estimation, water-level, average, zonation.

ME-3: Marine Ecology & Chemistry Combined in the Field. (There is no classroom lab with this program).
2-3hrs, ½ - 1 mile easy walk

This program combines the core principles of the population survey and basic chemistry data collection. Little time is spent on free exploration of the tidepools. Students participate in a population survey and take water chemistry tests in the field.

Nature Journaling Activity or Walk

0.5-1.5 hrs, adaptable to various time frames and settings.

Students use their senses to make and record observations of the natural environment in their field journals. Observations are recorded as sketches and written descriptive text. Students explore different scales, focusing on a small piece of the environment, and the big picture, specifically how they connect with the world around them. Students are encouraged to generate questions and use inquiry as a basis for experiential learning.

Photo Journalism

2hr - 2.5hr part classroom and part outdoors

Through the combination of photography and science writing students create a magazine article for the "SEA magazine." Students learn how to capture and edit a photo and how to write a science-based paragraph augmented with photographs. One third of class time is spent learning to take photos that tell a story, one third of the class period is spent composing photos and researching ecology topics, and one third of the class is spent writing/ editing photo captions and fact based stories.

Schoodic Head Hike

4hrs & 4 miles of moderate trail and walking on roadways. This hike combines the curriculum features of the soil walk and the forest diversity hike with some GPS skills. Students survey habitats from shrub lands to summit while investigating the physical differences between habitats.

Soil Survey Walk

2hr moderate walk, variable distances

Students participate in a hands on field experience examining soil layers (or horizons), taking soil cores, and temperature. Students learn about physical and chemical weathering as they study layering in a soil pit. Students use scientific tools to collect data on localized percolation rates, soil pH, and core depths they construct soil maps of the campus area. The formation and types of different soil are addressed in the program. During this time students also learn why soil is important to the health of an ecological community and its connections to humans.

Vocabulary/ concepts: percolation, soil, pH, horizons, layering, temperature, sedimentation, duff, humus, organic matter, decompose, weathering, parent material, oxygen, pore space, mottling, tap root, hair root, absorption, photosynthesis, transport, xylem, phloem, carbon cycle, transpiration, ground cover.

Weather Science

2-2.5 hrs. (part in the classroom and part outdoors)

The program begins with an overview of the factors that create and influence weather. Students learn about various types of weather instruments and utilize them in the field to record and interpret data. The program also explores the difference between weather and climate, focusing on climate change, its causes and effects.

Vocabulary/ concepts: climate, weather, instruments, data collection, interpreting data, wind direction & speed, notation, temperature, humidity, wind-chill, barometric pressure, fronts, systems, maximum, minimum, precipitation, and density.

Additional Options

Teacher Led Instruction Time

Teachers have the option of signing up for a period of time where they lead their own study program. Length ranges from 2-4 hours. Teachers may use this time to work on a school related project in the field at Schoodic, lead students on a team building or recreational hike up Schoodic Head (new restriction require all groups to break out into groups of 15 or less, so bring multiple leaders), work on art projects or other activity related to learning that is emphasized in the SEA setting. Teachers are responsible for all of the programming during this time period. If arranged in advance, the park can provide art supplies, a ground water model, water cycle activities, basic equipment, skulls, pelts, food web and bioaccumulation activities, classroom space, and recreational equipment. Note: All park regulations must be respected. Natural materials cannot be collected for art projects.

Evening Programs

Art

1.5hr – 2hr classroom program

Students have the opportunity to participate in interactive programs offered by local artists, staff with art backgrounds, and Acadia's Artist-in-Residence program. Program format will differ with each artist. Sketching, painting, writing poetry, music and photography have been offered through this program.

Campfire

1.5hr - 2hr outdoor activity

This evening program allows for decompression from academics and structured learning. Students learn the importance of responsible fire building (weather dependent) and engage in a number of different games, interactive stories, songs, legends and lore around the fire. Options include using an iPad to tour the night sky using a variety of applications. Vocabulary/ concepts: diurnal, nocturnal, crepuscular, adaptation, predator, prey, echolocation, rods and cones of the human eye, Milky Way, North Star Polaris, constellation, satellite, adaptations.

Night Walk

2hr - mainly outside with no flashlights (adults are given red lights for safety)

Students have a fun experience while learning about nocturnal adaptations, predator/ prey relationships, their five senses and astronomy (weather dependent). Vocabulary/ concepts: diurnal, nocturnal, crepuscular, adaptation, predator, prey, echolocation, nictitating eyelid, rods and cones of the human eye, bioluminescence, chemical bonds release energy when broken, astronomy, Milky Way, North Star Polaris, constellation, satellite, consumer, producer.

Conclusion Programs

Campus Test Quest

1hr – 1.5hr GPS scavenger hunt on campus

A culminating activity that connects GPS skills with content learned during the week. Students navigate to different stations using GPS units. Each station focuses on various sciences learned during the program.

Conclusion Skits

1-3hrs.

Students work in small groups to create a skit that represents their educational experience at the SEA program. Limited props and supplies are provided. Students are encouraged to be creative. Skit formats vary from newscasts, songs, to short plays. Students present their skit to the whole class before leaving.

Integrated GPS Mapping

1-1.5 hrs.

Rather than focusing on forest succession, students learn to use GPS units during the welcome portion of their field trip. Way points are taken at each program activity throughout your stay. Students use waypoints to construct a digital map on as part of their conclusion exercises. This program does not count as one of your time slot choices, we fit it in throughout your stay and do the mapping portion during the last day's wrap-up period.

Ipad Scavenger Hunt

1-2hrs.

Students use Ipad to capture and share their learning throughout the SEA program. Students invent creative visual solutions to represent the concepts and ideas they have covered during their SEA field program.

Reflections/Conclusion Program

1hr - 1.5hr classroom program

Students are given a chance to reflect on their time spent as a part of the SEA program. Students then write a postcard to themselves describing some of things that they learned and enjoy during their stay Schoodic. The goal of this program is to conclude the student's time and to provide them with a way to later remember their visit. Postcards are sent to the school to be given to each student later in the year.