



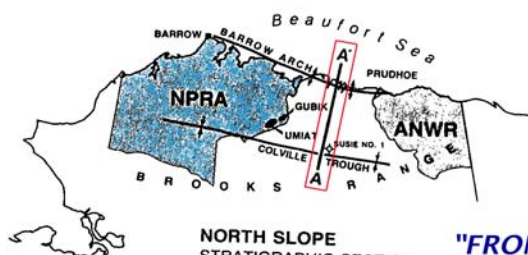
PACIFIC
SECTION

2011 SPRING CONVENTION ISSUE *Pacific Sedimentologist*

Newsletter of Pacific Section, SEPM (Society for Sedimentary Geology)

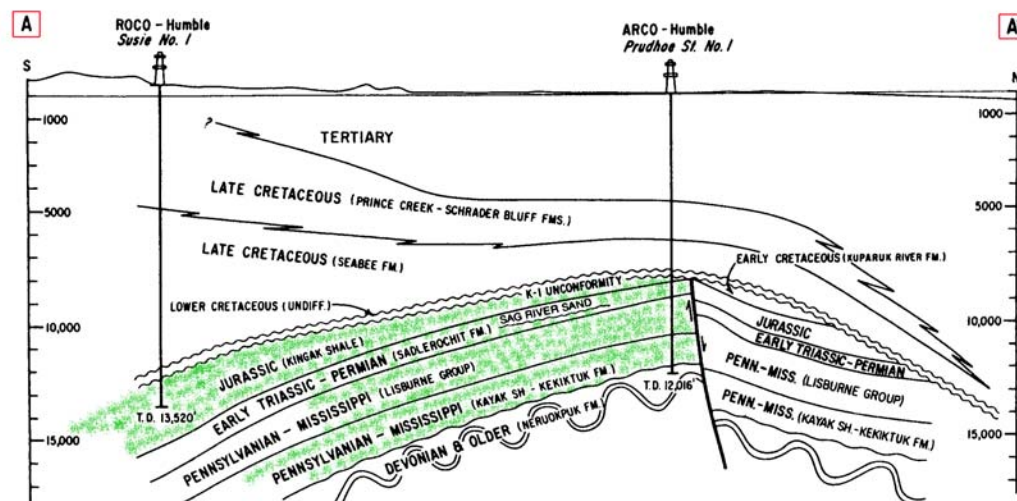
volume 83, issue 1

April, 2011



JOINT CONVENTION
PS-SEPM, PS-AAPG and
WESTERN REGION SPE

"FROM THE ARCTIC TO THE CORDILLERA"
MAY 6-14 ANCHORAGE, ALASKA



* SIMPLIFIED FROM AGS CORREL. SECTION - MARCH, 1977 (MODIFIED AFTER SPECHT, et al (1987), PS-SEPM BOOK #50)

See also: **OUR NEW PS-SEPM web site: www.pacificsectionsepm.org**
For more information, including current list of publications available for sale



PACIFIC SECTION, SEPM

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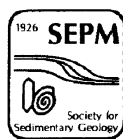
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***REMINDER:** In an effort to "Go Green" and remain cost-effective, the PS-SEPM Newsletter is now issued in electronic version ONLY. However, members without Email access may still obtain hard copies for an extra fee....[Please Refer To Membership Form inside](#).*

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SPRING 2011 CONVENTION ISSUE



PACIFIC SECTION

PS-SEPM President's Message

Greetings All,

As your incoming Pacific Section SEPM President, I look forward to continuing and building upon the society's growth that our past President, Frank Corsetti, set us up to achieve. The New Year is already into its fourth month and like me, I imagine you too are planning your 2011 excursions to destinations that feature superb geology. I thought it thus appropriate to commence my note with a "Save the Dates" for our two Fall Field Trips to insure that these geology-packed outings find their way on to your calendars. On September 24-25, I hope to find you, your colleagues, and students trekking with our trip leaders, Dan Sturmer, Jim Trexler, Pat Cashman, Rachel Dolbier, and Tom Anderson (University of Nevada, Reno) in north-central Nevada, through various sections of Mississippian-Permian strata. The highlights of this trip, from discussions of deformation and basin formational events, a gold mine tour, to collecting Triassic ammonoids, can be found on our new web site at www.pssepm.org or at www.pacificsectionsepm.org. This trip is shaping up to be an exciting adventure with our Nevada cohorts!

Now fast forward to November 5-6, to reserve the dates for our second featured PSSEPM field trip of the year, "The Monterey Formation of the Pismo Basin, California", where sequence stratigraphy and reservoir characterization of fine-grained rocks are the featured themes. Field trip leaders Kevin Bohacs (ExxonMobil Upstream Research Company), Margaret Keller (USGS), and Jon Schwalbach (Aera Energy LLC), all experts in the Miocene Monterey Formation, will forge us along the central California coast for a look at classic Monterey Formation outcrops at the Shell Beach, Point Buchon, and Montana de Oro localities. Discussions from the Monterey Formation as a Petroleum System, to depositional processes and paleoceanographic conditions, geochemical variation, and reservoir characterization are but a smattering of the hot topics our trip leaders will have us ponder. Come and join us on this two-day journey to see what else our leaders can teach us as we grapple with unraveling this complex and heterogeneous rock type.

Our new web site, with its own domain, will be your resource for all things Pacific Section SEPM, so be sure to check it out regularly for not only details regarding these field trips but for information on our extensive list of guidebook publications, award categories, photo gallery, and a host of other features we are currently working on. On behalf of the entire ExCom Board, I would like to thank the society's pioneering web site efforts of Pat Abbott, Tony Carrasco and Gary Girty, San Diego State University, for their years of service in broadcasting PSSEPM events and announcements to our membership.

The last bit of news is a reminder of our upcoming 2011 PSSEPM convention in Anchorage, AK, May 6-14, whose theme is "Arctic to the Cordillera: Unlocking the Potential". Student members, although it's too late to submit a presentation for the Alaska convention, I encourage you to start working now on polishing up your research to present at the spring 2012 PSSEPM Convention in Long Beach to be considered for the John D. Cooper (undergraduate) or the John C. Crowell (graduate) Awards for outstanding oral or poster presentation at our spring meeting.

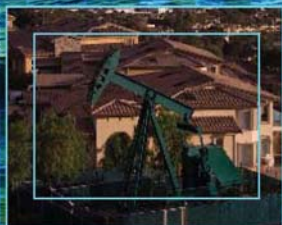
In closing, I hope I have conveyed to each of you that PSSEPM has an exciting year of activities planned with you in mind, from the fall field trips to the special student award opportunities, to the announcement of our new web site.

The best to you in 2011 and see you on the outcrop!

Regards,

Bonnie Bloeser
Aera Energy LLC
PS-SEPM President 2011

2011 Western Region Meeting, SPE
Pacific Section, AAPG
Arctic to the Cordillera: Unlocking the Potential



6 - 14 May 2011
Technical Sessions 9 - 11 May 2011
Anchorage, Alaska, USA
www.spe.org/events/wrm
www.psaapg.org



*PLEASE BE SURE TO STOP AND VISIT THE PS-SEPM BOOTH AT THE CONVENTION
FOR OUR GREAT PUBLICATIONS & NEW T-SHIRT !!!*

Key Sessions & Field Trips, May 6 - 14 Anchorage Convention

Our annual Spring convention occurs jointly this year in Anchorage, Alaska, with Pacific Section AAPG and the Western Region of the Society of Petroleum Engineers (SPE).

The Technical Program includes seven oral sessions and three poster sessions, for a total, of roughly 90 presentations. A major emphasis of these sessions is the two major petroleum production and exploration regions of Alaska, the **North Slope** and **Cook Inlet**. The Cook Inlet forearc basin is currently undergoing a resurgence of interest by both industry and the USGS. The technical program is in honor of **Dr. Ken Bird** with the USGS and formerly Shell Oil. During more than 35 years with USGS, Ken established a distinguished record of research, with emphasis on the regional geology, stratigraphy and petroleum systems of the Alaska North Slope.

There are also four field trips and ten short courses scheduled. One of the field trips is pre-conference, whereas the remaining three are post-conference.

You may register for the convention at the PS-AAPG web site www.psaapg.org. A complete listing of presentations and presenters is also available at this web site, plus convention logistics.

Technical Sessions include the following:

- **Reservoir Quality: Analysis & Prediction (co-sponsored by PS-SEPM)**
- **Geology and Hydrocarbon Potential of the North Slope, Offshore Beaufort and Chukchi Seas**
- **Tectonics, Sedimentation & Energy Resource Potential of Southern Alaska**
- **Geology and Tectonics of North Alaska**
- **Petroleum Systems in Alaska and the Western Cordillera (co-sponsored by PS-SEPM)**
- **Cook Inlet Oil & Gas Fields**

Field Trips include the following:

Turnagain Arm – Resurrection Bay Field Trip (May 6 – 7); Susan Karl (USGS) and Rod Combellick (Alaska DGGS)

This field trip will examine the Mesozoic accretionary complex and a portion of the 1964 megathrust earthquake deformation zone in South central Alaska. Day 1 will include a transect across the accretionary complex exposed along Turnagain Arm. The consequences of Paleocene to Eocene spreading ridge subduction and late Holocene Pacific plate subduction as manifested by the 1964 M9.2 earthquake, and great paleo-earthquakes recorded in coastal marsh deposits. Day 2 will include a visit to the Alaska Sea Life Center, a visit to Seward Harbor (site of 1964 tsunamis) and a boat tour to examine the Resurrection Peninsula Ophiolite, a remnant of the Eocene subducted spreading ridge.

Sedimentology, Reservoir Quality and Tectonic Setting of Late Miocene-Early Pliocene Gas-Bearing Formations, Upper Cook Inlet, Alaska (May 12 – 14) Dave LePain, Bob Gillis and Marwan Wartes (Alaska DGGS) Ken Helmold (Alaska DOG) Bill Morris, Greg Wilson (Conoco-Phillips)

The Cook Inlet Forearc Basin is a long-lived feature which extends from Shelikof Strait in the southwest through the length of the Matanuska Valley in the northeast. The stratigraphic record of this basin includes a thick Mesozoic section overlain by nearly 26,000 feet of Tertiary non-marine coal-bearing strata. All significant petroleum production to date has come from Tertiary reservoirs in upper Cook Inlet.

This three-day field trip examines the sedimentology, sand body geometry and reservoir quality of gas-bearing late Miocene and early Pliocene strata (Beluga and Sterling Formations) exposed in coastal bluffs between Soldotna and Homer on the Kenai Peninsula. The tectonic context of the forearc basin is explored during the first day through several stops in Mesozoic-age rocks of the accretionary complex bordering the eastern basin margin. The sedimentology and sand body geometries of the upper Sterling Formation will be examined during

Day 2, via two beach walks, at Clam Gulch and near Ninilchik. On Day 3, the Beluga Formation will be examined through a beach walk northwest of Homer. Participants will return to Anchorage by 6 PM of the third day.

Tertiary Coal-Bearing and Holocene Deposits,

Nenana Basin, Alaska (May 11 – 13)

Jerry Siok (BP Exploration – Alaska) and Steve Wilbur

This three-day trip will traverse up the Susitna River Valley through the central Alaska Range to Tertiary interior basins. The trip will provide a general tour of central Alaska geology, and include stops overlooking the Alaska range with displays and discussions of the tectonics of south-central Alaska. Weather permitting, there will be classic views of Denali, the highest peak in North America. Large-scale Holocene fluvial depositional systems will be observed along the way, providing a model for subsequent features observed in outcrops. Tertiary to Holocene fluvial-alluvial sequences in the Nenana Basin will be observed in detail, and the trip will traverse the type section of the Tertiary coal-bearing Usibelli Group and Nenana Gravels with world-class badlands outcrop exposures. Usibelli Coal Mine is the only operating coal mine in Alaska; the mine operators will provide a first-hand look at their state-of-the-art engineering, mining equipment and reclamation activities.

SUMMARY OF PS-SEPM FALL FIELD TRIP, OCTOBER 16 - 17, 2010

LATE PALEOZOIC SECTION OF ARROW CANYON, NEVADA

Leader: Dr. Matthew Clapham, UC Santa Cruz

An outstanding turnout (eighty-three PS-SEPM members, including over 50 students) participated in the outstanding fall field trip to view the spectacularly-exposed upper Paleozoic stratigraphy of Arrow Canyon, Nevada on October 16 -17, 2010, led by Dr. Matt Clapham of UC Santa Cruz. As with all PS-SEPM field trips, this one combined terrific geology, great food and excellent company. And the weather was great, too.

The field trip visited the spectacular late Paleozoic miogeocline section at Arrow Canyon, Nevada, to observe more than 1 km of mid-Mississippian to lower Permian strata cropping out along the canyon walls with nearly 100% exposure. The thick section reflects near-continuous subsidence and accommodation on a long-lived carbonate ramp, driven by a probable combination of Ancestral Rockies tectonism to the east and transform deformation along the continental margin to the west, during Laurentia-Gondwana collision. Glacioeustatic sea level fluctuations superimposed on this subsidence produced well-defined subtidal and peritidal cyclicity, punctuated by significant periods of emergence with development of impressive karst and paleosol horizons.

On Day One, participants examined shifts in lithology and facies stacking from tropical Mississippian limestones dominated by small eustatic fluctuations (Visean Yellowpine and Battleship Wash Formations) to mixed photozoan (warm-water) and heterozoan (cool-water) limestones of the Pennsylvanian-Permian Bird Spring Formation recording high-amplitude eustatic fluctuations during the late Paleozoic ice age.



Spectacular outcrops of upper Yellowpine Limestone (Monte Cristo Group, Visean - Upper Mississippian) in narrow upper portion of Arrow Canyon. Photo courtesy of Noel Velasco.



Colonial rugose coral biostrome within subtidal skeletal grainstones of the Upper Yellowpine Limestone; photo courtesy of Noel Velasco.

The upper surface of the Battleship Wash Formation is a macro-karst surface containing potholes and fissures up to 30 cm deep and the remnants of a lycopsid forest mire. Lycopsid tree root systems are common on this surface, with individual roots up to 50 cm in diameter and radiating several meters from the central point. The overlying Indian Springs Formation records marginal marine to non-marine deposition, including abundant paleosols and marginal marine fossils such as the inarticulate brachiopod *Orbiculoidea*.

The lower Bird Spring Formation in Arrow Canyon contains the Global Stratotype Section and Point (GSSP) for the mid-Carboniferous (Mississippian-Pennsylvanian) boundary. Abundant diagenetic chert nodules are present in the Bird Spring Formation and appear to be non-randomly distributed throughout parasequences with myriad nodule sizes and morphologies, including the "Cannonball chert bed" of late Pennsylvanian (Kasimovian-Gzhelian) age. The succession contains a rich fauna, including a rugose coral biostrome in the Battleship Wash Formation and abundant brachiopods, bryozoans, crinoids, and other fossils in the Bird Spring Formation.



Crinoid columnals in skeletal grainstones of the Battleship Wash Formation. Photo courtesy of Noel Velasco.



Fossilized Lycopsid roots (Stigmaria) within well-developed karst horizon at contact between upper Battleship Wash Formation and overlying Indian Springs Formation; Wayne Henderson's wedding ring for scale; photo courtesy of Wayne Henderson.



“Cannonball” chert horizon within inner-ramp facies, lower Bird Spring Formation. Photo courtesy of Wayne Henderson.

A memorable open-pit BBQ dinner with liquid refreshments, and the swimming hole on the Muddy River, punctuated the evening of Day One, at the Palm Creek campground facilities in Moapa. A brief squall hit the campground at roughly 5 AM, surprising several campers, but fortunately cleared in time for breakfast on Day Two.

On Day Two, participants visited Battleship Wash, just south of Arrow Canyon, to hunt for crinoids from one of the richest Lower Permian crinoid localities in the world (62 described species), within subtidal “patch reef” encrinite deposits of the upper Bird Spring Formation.

Details of the stratigraphic section of Arrow canyon and the field trip are summarized within PS-SEPM publication 109, listed for sale in the Publications List at the end of this newsletter.

Initial Notice: PS-SEPM 2011 Fall Field Trips

Our society will be sponsoring **TWO** great field trips this fall, to two very different locations, each with terrific geology and great scenery!

Trip #1 - – Late Paleozoic basins, tectonism, and resources of north-central Nevada

Leaders: Dan Sturmer, Jim Trexler, Pat Cashman, Rachel Dolbier, and Tom Anderson; University of Nevada, Reno

September 24-25, 2011

In this first of two fall PS-SEPM field trips, we will investigate late Paleozoic (post-Antler Orogeny) deformation and basin formation in north-central Nevada and learn how understanding this complex geology is useful for locating and recovering natural resources. The field trip will begin Friday afternoon in Reno (or join us Saturday morning in Winnemucca). Saturday we will drive east to Carlin Canyon, where we will walk through a section of Mississippian–Permian strata in four, stacked, angular unconformity-bounded basins. We will observe and discuss the several generations of folds and faults developed in these strata and discuss how both the deformation and basin formation events relate to the late Paleozoic tectonic evolution of western Laurentia. In the afternoon we will travel west to Edna Mountain to see more effects of late Paleozoic-Mesozoic deformation on late Paleozoic basin deposits. We will also look at the other packages of rock exposed in the area: the Golconda allochthon which contains deep marine deposits which were thrust over the late Paleozoic rocks during the Sonoma Orogeny, and the Lower Paleozoic Preble Formation, which contains metamorphosed and deformed mixed carbonate-siliciclastic deposits of suspect origin. Saturday night we will enjoy a traditional Basque dinner in Winnemucca and a talk on the geology of the Getchell Trend and Twin Creeks Mine.

Sunday (Day 2) will begin with a tour of Twin Creeks Mine (owned by Newmont Mining Corporation), led by mine geologists. Twin Creeks is a very large surface mine in a Carlin-type gold deposit: disseminated gold atoms and particles generally hosted in sedimentary rocks. The gold at Twin Creeks is hosted in Pennsylvanian-Permian carbonates; a Cambrian-Ordovician package of carbonates, siliciclastics, and mafic flows and tuffs; and Ordovician greenstones. We will then caravan back to Reno, with optional stops at Fossil Hill in the southern Humboldt Range to collect ammonoids out of the Triassic Star Peak Group, or the Desert Peak-Brady's geothermal field to discuss geothermal resources in Nevada.

Trip #2 - The Monterey Formation of the Pismo Basin, Central California Coast Ranges

Leaders: Kevin Bohacs (Exxon-Mobil Upstream Research), Margaret Keller (USGS) and Jon Schwalbach (Aera Energy)

November 5 – 6, 2011

Main Themes: Sequence Stratigraphy and Reservoir Characterization of Fine-Grained Rocks

- Classic Monterey Formation outcrops in the Pismo Basin at the Shell Beach, Point Buchon, and Montana de Oro localities (also visited as part of 1992 PS-SEPM Fall Field Trip).

- Techniques to use in the sequence stratigraphic analysis of mudrocks: bed and bedset variation, stacking patterns, and identification of key stratigraphic surfaces.
- Discussions of depositional processes and paleoceanographic conditions interpreted from hemipelagic sediments, links to rock fabric, geochemical variation, and detailed petrographic studies.
- The Monterey Formation as a petroleum system.
- Reservoir characterization of porcelanites, siliceous shales, cherts, and dolomites – including matrix properties and fractures.



Spectacular coastal outcrop of Monterey Formation, Point Buchon, Pismo Basin, CA; photo courtesy of Jon Schwalbach

(More details to follow in Fall 2011 Newsletter)

RANDOM NOTES

NEW PS-SEPM Web Site Now Up and Running!

Eric Smith of Aera Energy is the new PS-SEPM Web Master. He has constructed a new web page which can be viewed at [**www.pacificsectionsepm.org**](http://www.pacificsectionsepm.org).

The new web site includes details of the PS-SEPM organization, convention/meeting information, field trip information, list of PS-SEPM publications, past field trip and convention photos, Society awards, newsletter archive, status of new endeavors such as the AAPG Data Pages project (discussed below), and historical archives of the Society (past awards, past Executive Committee members, etc.).

We wish to express our sincere gratitude to Tony Carrasco of San Diego State University for volunteering his time and serving for many years as the PS-SEPM Web Master, and for his outstanding contributions in this regard.

The web page is a work-in-progress, and will be evolving constantly to best serve the needs of our membership. Your comments and suggestions are welcomed and encouraged!

PS-SEPM Awards Honor John Crowell and Ray Ingersoll

The Executive Committee of PS-SEPM has voted to create two additional new annual awards, the **John C. Crowell Award** for outstanding graduate presentation, and the **Raymond V. Ingersoll Award** for outstanding undergraduate senior thesis in sedimentary geology. Each will first be awarded during our Annual Spring Meeting in May, 2012. More details of these awards and their respective prizes will be included within the Fall 2011 newsletter. **PROFESSORS ARE ENCOURAGED TO ALERT THEIR STUDENTS AS TO THESE AWARDS, and ENCOURAGE SUBMITTAL OF CANDIDATES!**

Electronic Catalog Of PS-SEPM Publications: In Progress!

The Executive Committee has entered into contract for scanning and electronic (PDF) availability of ALL PS-SEPM publications, via the AAPG "Data Pages" Project. The E-copies include rare, old and out-of-print publications as well as those still in print (see Publication List at rear of this newsletter). Thank you to those members who have graciously provided copies of their out-of-print and rare pubs!. The digitizing process has commenced and is tentatively scheduled for completion by the end of 2011 or early 2012.

PS-SEPM Secretary and Managing Editor **Mario Caputo** has worked diligently to research, collect and coordinate the scanning of these publications, interfacing with the AAPG Data Pages project representatives to ensure successful completion of this important project. **Thank you Mario for all of your efforts!**

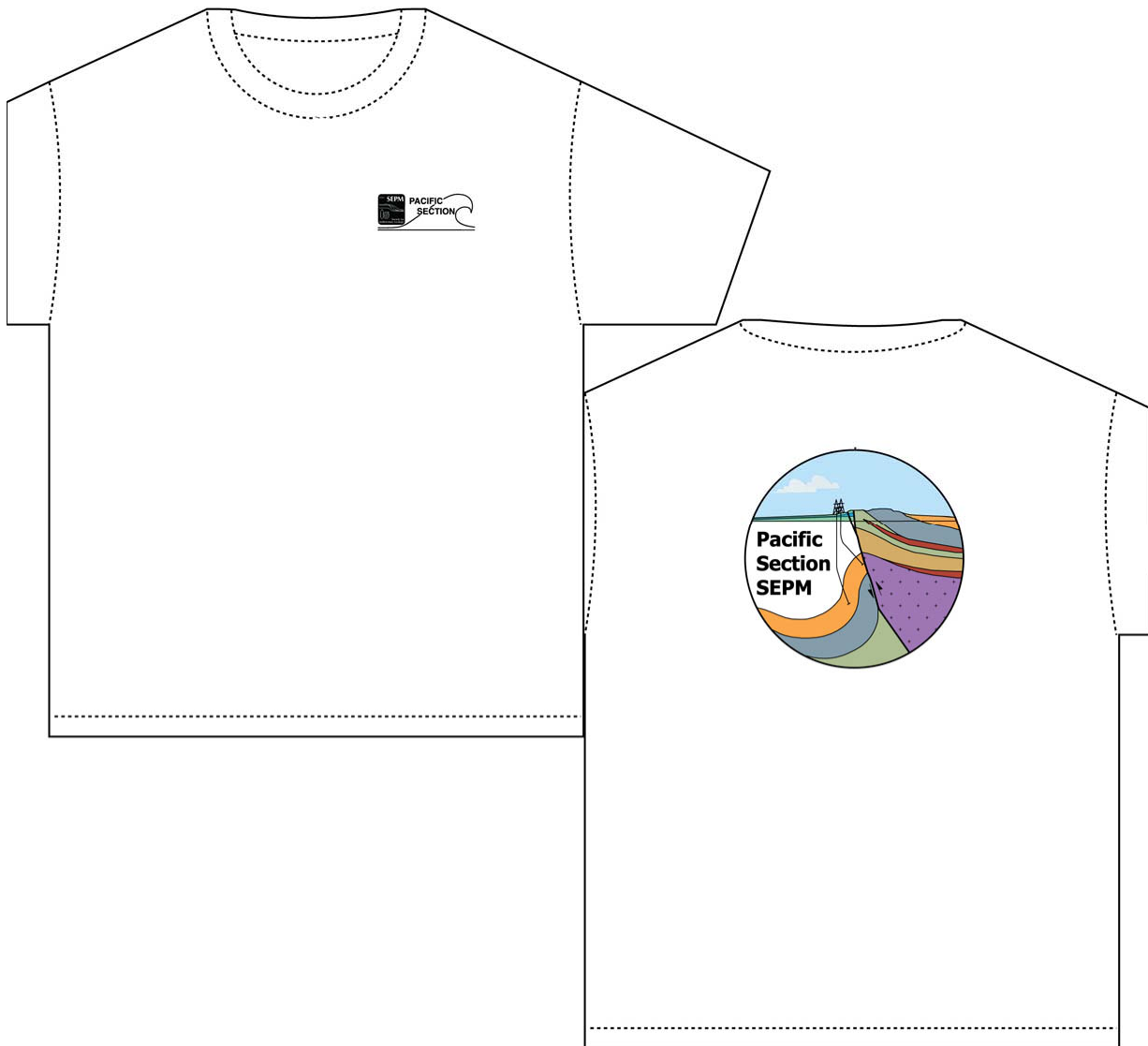
Our goal is to finally make E-copies available as PDF documents for sale via the **NEW PS-SEPM web site**, in part to encourage sales of our entire outstanding publications catalog to universities, corporations, libraries, etc. as an added revenue stream. Marketing of the PS-SEPM catalog via the Data Pages consultants is part of our contract agreement.

More details and status updates will be provided as the project progresses.

Historical Archive Of PS-SEPM

We are actively seeking anyone with information regarding the history of PS-SEPM to please contact **Ray Ingersoll** (ringer@ucla.ess.edu) with this information, so that we may develop a comprehensive historical archive for our web site. Thus far, efforts have produced an impressive first draft of this archive....many thanks to Ray for spearheading this project!

Information of interest includes a) listing of past officers; b) listing of past field trips and their leaders, and c) listing of those who have received PS-SEPM awards.



PS-SEPM T-Shirt Now Available!

You know it's been years. You know you've been waiting.
Well, the wait is finally over....

Price: \$13.00 each

Please stop by the PS-SEPM Booth at the Convention in Anchorage May 6-10 to purchase.
Many different sizes available!

*PACIFIC SECTION - SEPM
MEMBERSHIP INFORMATION, 2011*

The Pacific Section SEPM has grown to become an international society with more than 400 members, attracting students and working professionals from the United States, mainly from California and other Pacific states including Hawaii and Alaska, and from Canada, Europe, Asia, and South America. Help maintain the vitality of the Pacific Section, SEPM by renewing your membership and recruiting new members, especially undergraduate and graduate students majoring in the geosciences. Please distribute copies of the membership form (**provided on the next page**) to colleagues and students who have an interest in sedimentary geology. The form is available also on the PS-SEPM website.

A **Lifetime Membership** is also available for a one-time dues payment. See schedule below for age and payment categories. Honorary and Lifetime Members are permanent members of the Society; they are exempt, of course, from further dues payments. Please send your membership application or renewal to:

Wayne Henderson, PS-SEPM Membership Manager
Department of Geological Sciences
California State University, Fullerton
Fullerton CA 92834-6850

PLEASE PROVIDE/UPDATE YOUR EMAIL ADDRESS WHEN YOU RENEW!!
(Otherwise You Will NOT Receive Future Newsletters And Announcements!)
(Except As Described Below)

Membership Dues

Regular membership dues:

\$ 7.50 for a 1-year professional membership
\$20.00 for a 3-year professional membership
\$ 5.00 for a 3-year student membership

(Please add \$25.00 to each category if you wish to receive Hardcopy versions of the Newsletter)

Lifetime membership dues:

\$150.00 for age group 20-40 years
\$100.00 for age group 40-60 years
\$ 50.00 for age group 60 years and older

(Please add \$50.00 for each category if you wish to receive Hardcopy Newsletters)

Good Reasons for Joining the Pacific Section SEPM

- The Pacific Section SEPM is one of the premier geological societies of western North America.
- Members benefit from discounts on superbly done field-trip guidebooks and special publications that address sedimentologic, stratigraphic and paleogeographic aspects of the Pacific region of the United States.
- Your membership dues sustain the Society by helping defray costs of publications. They further help support the operation of the California Well Data Repository (for borehole logs, cores, cuttings, microfossils, and other data) in Bakersfield, California.
- A **Society Website** provides up-to-date information on officers and other members, field trips and conferences, short courses, publications, and job openings:

NEW WEB ADDRESS! <http://www.pacificsectionsepm.org>

BOOKMARK THE ABOVE WEB ADDRESS FOR QUICK REFERENCE!

Pacific Section – SEPM (Society for Sedimentary Geology)
Membership Form, 2011

Renew ☐

New Member ☐

Last Name	First Name	Middle Name or Initial
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Preferred Mailing Address: <i>Business or Home – COMPLETE ONLY ONE</i>			
Business	Company or Teaching Institution		
	Street or P. O. Box #		
	City	State	Postal Code
Home	Street or P. O. Box #		
	City	State	Postal Code

Telephone	
Business	
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FAX	

UPDATE Email Address

Employment	
Employer Name	
Job Title	

Education	
Highest Degree Earned	
Year Earned	
Institution	
Specialization	

State Certifications/Registrations

Regular Memberships (check ✓ one)	1-year professional	\$ 7.50	
	3-year professional	\$20.00	
	3-year student	\$ 5.00	
Lifetime Memberships (check ✓ age group)	20-40 years old	\$150.00	
	40-60 years old	\$100.00	
	60 years old and older	\$ 50.00	



Make check payable to "Pacific Section, SEPM" and send to:

Wayne Henderson
PS-SEPM Membership Manager
Department of Geological Sciences
CSU Fullerton
Fullerton, CA 92834-6850

<p>PLEASE HELP INCREASE MEMBERSHIP IN THE PACIFIC SECTION – SEPM. COPY THIS FORM AND GIVE IT TO STUDENTS AND COLLEAGUES WHO SHARE AN INTEREST IN SEDIMENTOLOGY.</p>

Pacific Section SEPM (Society for Sedimentary Geology)
ORDER & PRICING FORM FOR PUBLICATIONS STILL AVAILABLE *IN PRINT*

book #	TITLE	Non-member	Member	Qty
2	Turbidites and Deep-Water Sedimentation (Short Course Notes): Middleton, G V., Bouma, A. H., eds., 1973 157p. ISBN: 1-878861-60-3	12.00	10.00	OP
	The Paleogene of Panoche Creek-Cantua Creek Area, California: Payne, M., FT chair, 1974, 152 p plus 9 plates (1 copy)	10.00	8.00	OP
	Pacific Coast Paleogeography Field Guide #1: Depositional Environments of Lower Paleozoic Rocks in the White-Inyo Mountains, Inyo County, California: Moore, J. N., Fritsche, A. E., eds., 1976, 69p (J. D. Cooper copy)	3.00	2.00	OP
7	Pacific Coast Paleogeography Symposium I – Paleozoic Paleogeography of the Western United States: Stewart, J H., Stevens, C. H., Fritsche, A. E., eds., 1977, 502p. ISBN: 1-878861-59-X	17.00	15.00	
	Pacific Coast Paleogeography Field Guide #2: Cretaceous Geology of the California Coast Ranges, West of the San Andreas Fault: Howell, D. G., Vedder, J. G., McDougall, K., eds., 1977, 109p (1 copy)	6.00	4.00	OP
8	Pacific Coast Paleogeography Symposium 2 – Mesozoic Paleogeography of the Western United States: Howell, D. G., McDougall, K., eds., 1978, 573p. ISBN: 1-878861-58-1 (1 copy)	20.00	18.00	OP
	Pacific Coast Paleogeography Field Guide #3: Depositional Environments of Tertiary Rocks Along Sespe Creek, Ventura County, California: Fritsche, A. E., ed., 1978, 81p. (2 copies)	6.00	4.00	OP
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