

# NORTHERN CALIFORNIA GEOLOGICAL SOCIETY



NCGS FIELD TRIP  
Saturday May 3, 2014

## ***“ANCIENT SUBMARINE LANDSLIDES IN A SUBMARINE CANYON FILL – THE CARMELO FORMATION AT POINT LOBOS”***

**Leader: Dr. Edward Clifton, US Geological Survey, Geologist Emeritus**

The Carmelo Formation at Point Lobos State Reserve is a superbly exposed example of conglomerate and sandstone deposited in an early Paleogene submarine canyon. This field trip focuses on an aspect of the canyon that has been largely overlooked: the influence of large submarine landslides. Too large to be readily seen in outcrop, mass failures in the Carmelo explain many of its anomalous structural and sedimentologic features. The field trip will focus on the evidence for these features and their impact on the canyon fill. We will examine evidence for large-scale exhumation of the canyon that was possibly caused by a massive slide of the canyon fill. We will explore the baffling contact with the underlying granodiorite in the southern part of the Reserve and the possibility that it resulted from a massive slide. We will see how a large slide disrupted a thick succession of canyon fill and the possible impact on strata far removed from the slide. We will consider the possibility that none of the strata exposed on the South Shore of the Reserve is in place.

Please carpool share the ride and cost. We will circulate attendees list for carpooling to the meeting place. No. geologic hammers please.

**THIS FIELD TRIP WILL BE LIMITED TO 30 PEOPLE.**

\*\*\*\*\* Field Trip Logistics in preparation\*\*\*\*\*

**Time & Meeting Place:** May 3, 2014, 8:45 am at the Reserve entrances

**Cost:** \$30/person includes guidebook, contribution to the Reserve; morning coffee, muffins, lunch, refreshments. No more plastic water bottle, bring your own water bottle!

\*\*\*\*\*REGISTRATION FORM (Pt. Lobos Field Trip)\*\*\*\*\*

Name: \_\_\_\_\_

E-mail: \_\_\_\_\_

Carpool origin Residence: \_\_\_\_\_

Phone: \_\_\_\_\_ Phone (alternate): \_\_\_\_\_

Check no./amount \_\_\_\_\_

Please indicate if you want drive a car and the # of people ride share

Lunch: Regular: \_\_\_\_\_ Vegetarian: \_\_\_\_\_

(Please check one) \_\_\_\_\_

Please mail registration with a check payable to NCGS:

**Tridib Guha  
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