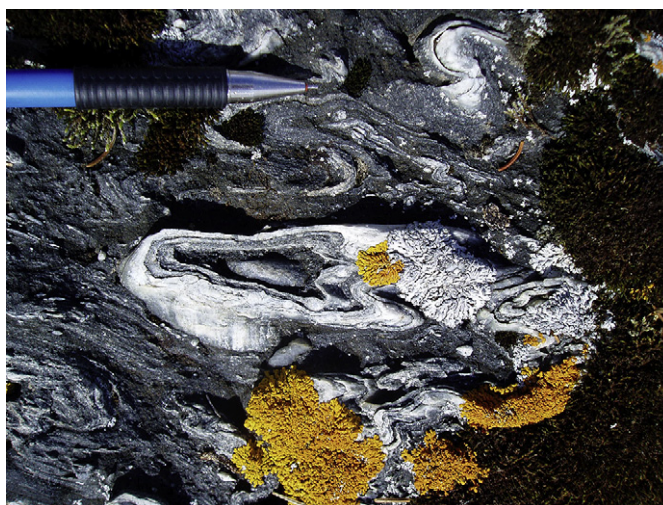




Photograph of the Month

Sheath fold in mylonite of the Assean Lake shear zone, northern Manitoba, Canada



Photograph by Yvette Kuiper, Boston College, [kuipery@bc.edu](mailto:kuipery@bc.edu) © Yvette Kuiper

The sheath fold in the photograph formed during dextral, southeast-side-up shear along the Assean Lake shear zone of the Superior Boundary Zone, Manitoba, Canada. The top of this photograph is towards the WNW. The shear zone dips steeply to the southeast. In general, moderately ENE-plunging lineations in the shear zone are folded by drag folds that have commonly developed into non-cylindrical folds. The lineations and the folds are interpreted as having formed during dextral, southeast-side-up, thinning flow. In this photograph, the lineation on the ESE limb of the fold plunges moderately to the E, and the fold hinge lines plunge steeply to the SSW and shallowly to the NNE. The lineation and fold hinge lines are thought to have partially rotated towards the direction of the maximum principal strain rate of the pure shear component, which may or may not be

parallel to the shear direction (cf. Kuiper et al., 2007). Location: 96.347W, 56.111N.

**Reference**

Kuiper, Y.D., Jiang, D., Lin, S., 2007. Relationship between non-cylindrical fold geometry and the shear direction in monoclinic and triclinic shear zones. *Journal of Structural Geology* 29, 1022–1033.

Yvette D. Kuiper  
*Department of Geology and Geophysics, Boston College,  
140 Commonwealth Avenue, Chestnut Hill, MA 02467, USA  
E-mail address: [kuipery@bc.edu](mailto:kuipery@bc.edu)*

15 January 2008  
Available online 27 June 2009