1080-05-140   **Guoli Ding** (`ding@math.lsu.edu`), Louisiana State University, **Stan Dziobiak** (`smdziobi@olemiss.edu`), University of Mississippi, and **Haidong Wu*** (`hwu@olemiss.edu`), University of Mississippi. *Large minors and circumference of 3-connected cographic matroids.* Preliminary report.

Oporowski, Oxley and Thomas prove the following result. For any integer n greater than two, there is an N such that every 3-connected graph with at least N vertices contains a W_n or $K_{3,n}$-minor. We prove a strengthening of this result. We also obtain a lower bound on the circumference of 3-connected cographic matroids. (Received January 21, 2012)