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Drell-Yan Measurements of Nucleon and Nuclear Structure with the FNAL Main Injector DONALD ISENHOWER, RUSTY TOWELL, MICHAEL SADLER, Abilene Christian University — Work preparing for Fermilab E906 will be reported. This experiment is a continuing development of the Fermilab E866/NuSea Drell-Yan experiment that determined the light anti-quark asymmetry in the proton. In the Drell-Yan process, a quark (anti-quark) in the beam hadron annihilates with an anti-quark (quark) in the target, which produces a lepton pair. Thus the D-Y interaction is able to probe the sea quarks. E906 will significantly improve the results above Bjorken x of 0.2, where statistics were limited in E866/NuSea. Using the Main Injector at Fermilab at 120GeV/c, an improvement of a factor of 50 will be possible.

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