addressed to the Earthwatch volunteers who pay to help (sweat) at this and many other archaeological sites. We wish that the public had such interest in preserving their soils.

References

Evaluation of Oil-Brine Damaged Areas for Productivity Using Electromagnetic Induction Techniques

W. M. McCauley, J. A. Doolittle, and S. J. Indorante

Introduction

In the oil fields of southern Illinois, barren areas damaged by oil brine are common. These areas are irregular in shape, and range in size from a few square feet to several acres. Commonly, these areas are located within row-crop fields or pastures, and are a nuisance to landowners. The management of oil-brine damaged areas is difficult as the concentration of salts is highly variable and unpredictable.

Brine is water that contains high concentrations of dissolved salts. In oil fields, drills commonly intercept brine in layers of sedimentary rocks. The oil and brine are separated during drilling operations. The oil is stored in tanks and the brine is deposited into pits or tanks before being reinjected underground. Oil brine spills are common. Spills are caused by leaking pipes, overflowing of storage pits, and flowage from uncapped abandoned wells. Spills may cause the soils to become so saline that the affected area becomes completely barren.

Resource Soil Scientist, NRCS, Benton, IL; Research Soil Scientist, NRCS, Radnor, PA; MLRA Project Leader, NRCS, Carbondale, IL.