

Current projections for shale oil and gas are huge. But are they realistic? An article in the February 21 issue of [Nature](#) suggests that these projections may be too optimistic:

Wells decline rapidly within a few years. Those in the top five US plays typically produced 80–95% less gas after three years. In my view, the industry practice of fitting hyperbolic curves to data on declining productivity, and inferring lifetimes of 40 years or more, is too optimistic. Existing production histories are a few years at best, and thus are insufficient to substantiate such long lifetimes for wells. Because production declines more steeply than these models typically suggest, the method often overestimates ultimate recoveries and economic performance. . . .

Shale gas thus requires large amounts of capital from industry to maintain production. Over time, the best shale plays and their sweet spots are drilled off, so the costs of keeping up supply will increase. Much of current shale-gas production is uneconomic, and will require higher gas prices just to maintain production, let alone increase it.

Time will tell whether this projection or the more common, optimistic ones turns out to be more accurate.