Gas Drilling in NYS: Riches or Ruin for Landowners and Communities?
By Rod Howe & David Kay (Cornell University)

High prices and new drilling technology have made natural gas recovery seem more economically attractive across a large portion of south-central New York State, part of the Marcellus Shale area, attracting energy companies from around North America. By the end of summer 2008 many NYS landowners had signed gas leases and many more had been approached to sign. Some perceive this as an exceptional opportunity for individuals and communities in an economically challenged region. Others fear dire, if unintended, environmental and social consequences. Many aren’t quite sure what to think.

Natural gas has been extracted from underground sources in NYS since 1821. More than 600 new drilling permits have been applied for during each of the past two years. Most existing wells have been drilled vertically to tap reserves a few thousand feet below the earth’s surface. New technologies – in particular, horizontal drilling combined with water intensive fracturing of the rock to release the gas from the shale matrix (“fracing”) – could make extraction from the Marcellus Shale economically feasible. However, while there has been some horizontal drilling in NYS, the combination of hydrofracturing and horizontal drilling required to tap the Marcellus formation has not yet been permitted in our state.

Landowners, municipal and state officials, energy firms, and concerned citizens are now paying close attention. Each of these groups has a range of interests, responsibilities, and opinions. However, as new issues like this emerge into public view, it is easy for rumor to outpace informed opinion. In order to make balanced, informed decisions, it is important that all concerns and hopes be carefully weighed and addressed. Despite the long history of gas drilling in the state, there is a general consensus that many questions posed by the proposed drilling for Marcellus gas do not yet have good answers.

In response, the NYS Department of Environmental Conservation has stated its intention to “ensure that any issues unique to Marcellus and other horizontal shale formation drilling are adequately addressed” through a new environmental review. The DEC has been further directed by the Governor to consider implications for “staff resources, existing regulations, jurisdiction over water withdrawals, permit application fees and procedures, and legal and regulatory compliance” and to look at “ways to enhance the role of local governments in the regulatory process and compliance.”

Here is a small subset of questions being regularly asked by landowners and local government representatives at the many community seminars and workshops that have been offered recently. Some questions have clear answers. Others do not.

**Local Government**
- Who regulates gas drilling and water withdrawals in NYS?
- What protections can Town government provide for local watersheds and aquifers?
- What, if any, kinds of rules, restrictions, and guidelines can municipalities pass to control gas exploration?
- What will the impact be on property taxes and assessments?
- Will our emergency vehicles be able to gain access to an accident site via the access roads or will we need ATV or snowmobiles in the winter?

**Landowners**
- How do I make sure that I’m getting the “going rate” for my area?
- What happens if I don’t sign a lease?
- Do I need a lawyer?
- Can I lease my gas rights without allowing access to the surface of the land?
- If a well is drilled on my property, what impacts can I expect?”

Some questions about the extent, recoverability, distribution and value of the gas resource will necessarily remain open until drilling in this portion of the Marcellus Shale provides tangible evidence. Moreover, proprietary and other information that becomes available as drilling proceeds will not be equally available to all parties. Even when information is made widely available, questions about validity are typical – not all people trust a given “authoritative” information source equally. Finally, even when information is accepted as valid, generally accepted goals - energy security, property rights, financial return, rural economic development, independence from foreign oil, reducing carbon emissions - may be in conflict and given different priority by different people.

There is a need for ongoing training, information sharing and public discourse. Many organizations within the Marcellus Shale region, including Cornell Cooperative Extension Associations and the NYS Farm Bureau, are fielding numerous calls. There have already been a number of informational events targeted to landowners and a smaller number for municipal officials. Many websites provide varying perspectives on the issue. CaRDI and CCE are committed to working with knowledgeable partners to help ensure as high a level of information, discourse, and policy making on this topic as possible. For more information and links to resources on this topic, please visit the Cornell Cooperative Extension Natural Gas Leasing website at: http://gasleasing.cce.cornell.edu/