Forensic Agronomy, a new tool to solve old problems

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There is a new science developing which has direct application to agricultural fraud cases. Forensic agronomy is the using of agronomic procedures to measure and verify facts pertaining to agricultural claims or losses. Once facts have been quantified and documented there is reduced room for argument, and the emotion of that issue is minimized for the case.

Agronomy is the general study or science of crop production that includes a large number of subtopics such as: genetics, fertility, soil, chemicals, range and grassland management, as well as production practices and procedures.

In my opinion fraud includes everything from misrepresentation of a loss by falsifying the value, amount, or quality of an alleged damage, to misappropriation of funds for coverage or loss.

A forensic agronomist is not an adjuster, but provides technical support to adjusters and legal council working with losses out of their normal domain of expertise. The adjuster skilled in structural damage is not accustomed to working with biological problems, and is lost if requested to prepare the information for presentation to legal council for further action.

Forensic agronomy normally is used to investigate issues over damage to crop or soil by a second or third party, such as chemical drift, livestock invasion, range fires, water drainage obstructions, and a host of other events.

Production problems pertaining to the loss of yield, including hail are covered by specific policies, and are adjusted by specialized personal. Once in a while someone can slip things past these adjusters and they need some expertise to help solve problems.

A forensic agronomist knows where to start looking for short cuts producers may have taken, producing a yield subject to federal crop insurance payment. These cases may include the use of improper seed sources, withholding adequate inputs such as fertility, herbicides, insecticides or irrigation water.

The age of a case is not always important to the forensic agronomist, many cases are received after crops have been removed and land tilled in preparation for another crop. Granted it is better if the agronomist can visit the site during the growing season, or during harvest. Most agronomist work around the time delay, and assemble useable information with information available to them.
Many agronomists use GPS and GIS technology when possible to increase the precession of their work. Placing a GPS in one’s pocket produces an exact map of where in the field the person had traveled, and can note specific points on a computerized map for future reference or application. As part of our practice I normally use a GPS when making aerial observations of fields or locations. The use of aerial observations and photography of a subject site often provides new or different insights of a specific problem not readily apparent from ground observations.

When working loss problems an Agronomist may use a variety of sources, from government’s documents, public records, and personal knowledge, to solve a given problem.

In our practice each case is approached with a unique procedure designed specifically for task at hand, while many of the procedures are similar to other cases there is no one method fits all approach. Information collected for cases is generally put into a format ready to hand over to legal council with the intension of it being sufficiently complete there is no need or room for litigation.

In conclusion there is a new tool available to insurance companies to investigate and assess claims that have questionable underpinnings. The American Society of Agronomy <http://www.agronomy.org> is the professional organization providing certification of professional agronomists and maintains a list of certified members. Not all certified agronomists do forensic work, as this is a new field and will have a good future.