As the bioenergy industry in the United States expands to meet increased demands for transportation fuel under the Renewable Fuel Standard and electrical power under state Renewable Portfolio Standards, farmers will seek the ability to grow dedicated, high yielding energy crops of a perennial nature on leased property. This is the third in a series of short articles intended to address a range of legal issues raised in a bioenergy farm lease. Our first article analyzed the necessity of long-term leasing provisions, flexible rental payments, and early termination clauses. Our second article discussed lease provisions related to the potential invasiveness concerns associated with some bioenergy crops. In this article, we consider the possibility for rhizome reclamation as an added element of perennial biomass production.

**Introduction**

A variety of state and federal renewable energy mandates and incentives,1 along with various sustainability/low carbon standards,2 are driving interest in production of perennial energy crops such as Miscanthus x giganteus. Once planted, Miscanthus rhizomes produce multiple tillers and additional rhizome material throughout the plant’s lifetime.3 The reclamation of rhizomes for subsequent planting at the end of a lease term is a potentially profitable enterprise. For instance, studies indicate that a three-year-old Miscanthus plant can produce 75-80 harvestable rhizomes,4 a hearty return on a farmer’s initial investment. Both the farmer and landowner, accordingly, will have a strong financial interest in determining the distribution of rhizomes at the end of the lease.5 As a practical matter, should the lease end while the Miscanthus crop is still producing high yields of biomass, the landowner may also wish to stipulate that some or all of the rhizomes stay on the property. Should the lease end and the landowner, for whatever reason, is not interested in continuing to grow Miscanthus on the property, the landowner, as discussed in our previous article,6 will have an interest in removal of the rhizomes in order to eradicate the crop. Furthermore, a landowner may be interested in keeping some or all of the rhizomes on the property so as to sell them.

Common law conventions, such as the doctrine of emblements and good husbandry clauses, are not...
prepared to address the novel issue of rhizome reclamation. Accordingly, parties must privately contract to protect themselves under a bioenergy farm lease.

The Doctrine of Emblements

The doctrine of emblements, a long recognized equitable remedy, is illustrative of the manner in which the common law fails to protect the interests of the parties to a bioenergy farm lease. The doctrine provides a tenant who holds farmland for an indeterminate period a right to remove from the land, after the termination of the tenancy, the emblements planted prior to the termination of the tenancy. The doctrine permits ingress and egress for necessary purposes, not a right of possession, and the right must be exercised within a reasonable time after the tenancy has ended.

Traditionally, the doctrine of emblements only applied to fructus industriales, plants that must be sown each year in order to produce. In practice, courts limited application of the doctrine to crops such as wheat and corn. This traditional definition was deemed too restrictive in light of modern agricultural practices. Perennial plants may be classified as emblements under the modern construction of the doctrine if they require extensive cultivation each crop year in order to bring forth the crop. In 1986, the Illinois Supreme Court specified crops such as hops, sugar cane, and some artificial grasses as potential emblements.

As Miscanthus is a grass, the modern statement of the doctrine seems to include the right of a farmer to harvest Miscanthus biomass after the termination of a lease, so long as the other factors are met. But what about the potentially valuable rhizomes—does the doctrine of emblements allow for their harvest?

While a court has yet to analyze this issue, the answer is likely no: even the expanded modern interpretation of the doctrine does not likely cover rhizomes. For instance, the Restatement of Property suggests that in the context of the doctrine of emblements, the term annual crops refers not only to those crops which have to be placed in the ground each year, but also those crops as to which the produce in any single year is principally the result of the attention and care exerted in that same agricultural year. Thus the biomass growing annually from the rhizome might be an emblement, but the rhizome itself continues to grow year after year in a perennial manner which defies this definition. Courts, therefore, are unlikely to grant tenants a right to post-lease rhizome reclamation under the doctrine of emblements.

On the other hand, the underlying purpose of the doctrine of emblements is the encouragement of agriculture and the protection of the tenant’s interest. In reaching this conclusion, the Illinois Supreme Court noted that if the right of emblements did not exist, the tenant may be deterred from putting the premises in crops or at least in certain kinds of crops. In the bioenergy context, tenants may forgo planting Miscanthus if the right to harvest rhizomes is not protected, particularly in light of the expected productivity increases and return on investment in years 3-20 after initial planting. Of course, tenants can, and should, protect themselves via private contracting. But in the absence of a specific lease provision, a tenant could make a compelling, although novel, argument for further extension of the doctrine of emblements. Specifically, courts should protect the rights of farmers to reclaim rhizomes through an equitable remedy for the same reasons courts initially established the doctrine of emblements: the encouragement of agriculture and the protection of tenant farmers.

Improved Good Husbandry Clauses

Standard form leases often contain language creating a duty for tenants to farm leased land in a manner consistent with a general standard of good husbandry. The words used to establish the standard often vary, as does the context in which the standard is created.

A good husbandry clause itself does not protect the right of the farmer to reclaim Miscanthus rhizomes, nor does a good husbandry clause necessitate the removal of rhizomes. The measure of good husbandry is often based on the common farming practices of the community—the growth of bioenergy crops is so new that there are no common farming practices to dictate the terms of such an arrangement.

However, landowners and farmers can craft improved good husbandry clauses that dictate how rhizome removal is to occur. These provisions move beyond legal convention and require that specific action be taken. For instance, a clause could read:
The tenant will farm in accordance with the highest standards of good husbandry and will take all first-class farmer-like steps to ensure the conservation of the natural resources and the long-term productivity of the farm. This includes removing the Miscanthus rhizomes from the property at the end of the lease term.

Such provisions could be incorporated into farm leases to protect the interests of landowners and farmers.

Termination Clauses

As discussed in our earlier article, pre-negotiated early termination clauses can be incorporated into bioenergy farm leases. These early termination clauses would alleviate many of the initial concerns raised by landowners in their reluctance to engage in long-term agricultural leases by balancing a landowner’s need for flexibility with a tenant farmer’s desire for security.

Early termination clauses, similarly, could be drafted so as to determine the disposition of rhizomes should the lease end before its specified term. Such arrangements would provide the certainty that both parties to a bioenergy farm lease desire with regard to rhizome treatment.

Conclusion

Because of its many economic and environmental advantages, increasing numbers of tenant farmers will be interested in growing Miscanthus as a bioenergy crop. The growth of Miscanthus raises the novel issue of rhizome reclamation, but common law conventions, such as the doctrine of emblements and good husbandry clauses, are not prepared to address this topic. As a result, parties should specify in the lease the right to reclaim viable rhizomes for subsequent use.

References


2 See e.g., Jody M. Endres, Legitimacy, Innovation, and Harmonization: Precursors to Operationalizing Biofuels Sustainability Standards, 37 S. ILL. UNIV. L. R. 1 (2012).

3 The authors would like to thank Lauren D. Quinn and Tom Voigt for their knowledge and expertise in the fields of ecology and agronomy, respectively.

4 Richard Pyter, Emily Heaton, Frank Dohleman, Tom Voigt & Stephen Long, Agronomic Experiences with Miscanthus x Giganteus in Illinois, USA, 581 BIOFUELS: METHODS AND PROTOCOLS 41 (2009). But see Barry Caslin, John Finnan & Lindsay Easson, Miscanthus Best Practice Guidelines, prepared by Teagasc and the Agri-Food and Bioscience Institute, September 2010, at 24 (“Planted [Miscanthus] crop will have a rhizome multiplication factor of 15 after 4 years.”).

5 This discussion assumes that the farmer has autonomous ownership over the rhizomes at the beginning of the lease term, but this may not be the case—patented plant varieties may include end use restrictions as a condition of sale similar to contractual restrictions on the saving of patented soybean seeds.


8 Id.

9 Id.

10 Id. at 416.
Neil E. Harl, AGRICULTURAL LAW § 121.05[1] (Matthew Bender & Co. Inc., 2010) (“To exercise the doctrine of emblements, lessees must establish (1) an emblement is involved; (2) the lease authorizes the planting of the crop in question; (3) the lease in question is for an uncertain period; and (4) the termination of the lease. Restatement (First) of Property § 121 cmt. f (1936).

Edward Cox, A Lease-Based Approach to Sustainable Farming, Part II: Farm Tenancy Trends and the Outlook for Sustainability on Rented Land, 16 DRAKE J. AGRIC. L. 5 (2011)