Kolka Family Ranch
Carbon Sequestration Case Study

Overview
The Kolka family, third and fourth generation ranchers in eastern Montana, registered and received payments for their carbon sequestration offset project in 2008. Ken and Peggy Kolka currently own and operate the Kolka Ranch, part of which was first established by Ken’s grandfather in the 1930s. Rotational grazing has always been an integral management practice for the Kolkas.

With 500 mother cows, the Kolkas also produce enough feed to sustain around 1000 head of cattle through the winter. Their son Jim plans to eventually take over the ranch, and daughter Emmy helps out on the ranch during her summer breaks from college, maintaining the ranch as a family operation. Participating in the carbon sequestration offset program is the Kolkas first attempt to diversify their income through payments for ecosystem services, so far with very positive results (for a concise description of the voluntary carbon market as it relates to rangelands, please see Appendix 1).

Fast Facts
- **Land owner/manager:** Peggy & Ken Kolka
- **Location:** Volborg, MT
- **Land Resource Region:** Western Great Plains
- **Ranch Size:**
  - Deeded acres: 7,340
  - Acres leased: 9,411
  - Acres enrolled: 8,797
- **Project type:** Rangeland soil carbon offset
- **Year enrolled:** 2008
- **Length of contract:** 2003 to 2013
- **Registry:** CCX
- **Aggregator:** CP Holdings
- **Carbon credits sold to date:** TBA
- **Year of Sale:** 2008
- **Total $ earned to date:** ~ $30,000

April 2010
Soil Carbon Sequestration Project

Why they enrolled
The Kolkas first heard about managing a ranch for carbon sequestration in 2007 but did not consider engaging in the process until 2008 when they were approached by John Lammi, an aggregator with CP Holdings. Initially unsure about what carbon offsets were all about, the Kolkas did some internet research and made some inquiries to get more information. Their main concern was ensuring that engaging in the carbon market would not require them to have an easement attached to their land. After a family discussion, they decided that since they were already in compliance with the CCX’s Rangeland Protocol, enrolling was a win-win situation and they began the application process.

Rangeland soil carbon project
Like many other ranchers involved in the early phases of the carbon market, the Kolkas relied heavily on Lammi’s knowledge and expertise to guide them through the process of enrolling their lands and reaping the benefits of the fact that their existing management practices meant they were already managing for carbon sequestration. Lammi provided technical support with their application, managed the verification process, and was the family’s main source of information for the project.

Assembling the documentation for their enrollment application took the Kolkas between three and four days. Prior to enrolling, the Kolkas had a written grazing plan for their Forest Service allotments, but not for their own deeded acres. Their daughter Emmy had some experience from high school courses and from Future Farmers of America and helped significantly with the application by assembling data and creating helpful charts about the ranch’s grazing plan.

The process went very smoothly, according to Peggy Kolka, and the family remarked that the notion of receiving payments for carbon sequestration using their existing management system seemed “too good to be true.” In fact, Peggy Kolka sums up their experience with an enthusiastic “It was too easy!”

Outcomes
The Kolkas have received two payments so far for their carbon offset credits. The first was for the sale of their backdated credits for which they received approximately $28,000. The second sale was of a smaller number of credits, most likely some from 2008, which netted the Kolkas approximately $5,000. In total they have received over $30,000 by selling their carbon credits through CCX.

Since the Kolkas first began participating in the carbon offset market, several neighboring landowners have signed up, possibly encouraged by the Kolkas’ own positive experience.
Is It Worth It?

The Kolkas involvement with carbon sequestration offsets is a direct result of outreach initiated by their aggregator, John Lammi. Unfamiliar with carbon offsets to begin with, they were not actively seeking out involvement in this type of program, and Lammi’s direction and guidance on assembling the required documentation, setting up the verification, and registering their carbon credits made the process very straightforward for the Kolka family. The involvement of their college-aged daughter, who had familiarity and skills with computer software, also greatly facilitated their enrollment.

This was the Kolkas’ first experience participating in so-called payments for ecosystem services. Peggy Kolka feels that the program has worked well for her family’s ranching business, though she expressed the concern of there being potentially “too much Washington” involved should the voluntary market become mandatory as it has in Europe.

Future Outlook

The Kolka Ranch experience provides a good example of the importance that outreach can play in spreading the word and getting ranchers involved in ecosystem services market opportunities.

Peggy Kolka recommends holding seminars and focusing on engaging ranch families with children planning on taking over the ranch operation. Kolka suggested that ranchers who do not anticipate keeping their ranch in the family over the long term are less likely to be interested in new programs and practices. She mentioned that ranchers in their area are very open to the Natural Resources Conservation Service and Extension, and that they would be good sources of information on carbon projects for ranchers.

The active interest and involvement of the Kolka children in the ranch’s participation in the carbon market exemplifies what may be a sea change in ranching, in which income streams are diversified and include payments for ecosystem services in addition to raising cattle.

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Appendix 1. Rangeland Carbon Offset Basics

Currently within the United States, the mechanisms for buying and selling carbon sequestration offsets are strictly through the voluntary market. The Chicago Climate Exchange (CCX) is the only legally binding system for trading emission sources and offset projects, although many carbon credits (each representing the reduction of one metric ton of carbon dioxide emissions) are bought and sold directly, usually through a private broker, as “over-the-counter” (OTC) transactions. Regardless of the mechanism for exchange, carbon credits are generally associated with some type of standard or protocol that verifies the amount of carbon sequestered by a given project.

Carbon credits sold on the CCX are generic, since they can come from either forestry, methane capture, renewable energy or agriculture and rangeland soil carbon projects. Over the past year, prices for these generic credits have ranged from over $7/ton in May 2008 down to their current price of $0.10/ton (www.chicagoclimatex.com as of April 5, 2010). Prices for CCX credits sold OTC are generally higher, since they are traceable to a specific offset project.

At present, the CCX is the only organization with a protocol for carbon offsets from rangelands. Led by a Technical Review Team of soil scientists, the CCX developed their Rangeland Soil Carbon Offset protocol in 2007. Landowner participation in the program requires a long term (minimum of 5 years) “legally binding commitment to defined management practices which increase soil carbon stocks on rangelands” (CCX 2009). Most landowners in the Midwest and West work with an aggregator, allowing them to be part of a pool of carbon credits from multiple properties. These aggregators (e.g. North Dakota Farmers Union, National Carbon Offset Coalition) guide landowners through the process of engaging in the carbon market.

The protocol uses Land Resource Regions, defined by the National Cooperative Soil Survey, as a geographic basis for issuance rates for below ground carbon sequestration and outlines a list of eligible practices to increase carbon sequestration (e.g. prescribed grazing schedules, ensuring sustainable forage for livestock and wildlife, contingency management plan for drought conditions) that must be documented in a range management plan. Practices must be voluntary, and above and beyond “business-as-usual” (CCX 2009).

To enroll, projects must be reviewed by a third party verifier to ensure they meet the eligibility criteria and that they “adopt and demonstrate conformance with a formal grazing plan” which, at a minimum…meets or exceeds the Natural Resource Conservation Service standard” for Best Management Practices (CCX 2009). With aggregated pools, only a random sample of 10 percent of the ranches in the pool are selected for in-field verification, though all ranches over 30,000 acres must be field verified during the first year. A Verification Report is submitted to the CCX for approval and landowners have the option to register their credits for sale through the CCX, for which they are charged a $0.15/credit registration fee, or they can sell them OTC.

The first iterations of the protocol included several provisions designed to encourage early participants in a fledgling market, such as 1) the ability to “back date” acres, allowing landowners to receive credit for “pre-compliance” with the protocol by enrolling rangeland managed using eligible practices initiated on or after January 1, 1999; and 2) the ability to enroll acres with “degraded status” which qualified for a higher carbon sequestration crediting rate. Both of these were eliminated in 2009, as they had served their purpose of attracting early actors to the carbon market; and the degraded status option posed the risk of creating perverse incentives to purposely degrade land and enroll it under that status in order to qualify for higher payments.