4-12-2010

Historical Cropping Practices, South Central Region of Idaho

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Introduction
This poster examines historical crop production in the South Central region of Idaho between 1938 and 2009. The South Central region is comprised of eight counties; Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka and Twin Falls (Figure 1). Historical acres harvested were examined for nine major crops; alfalfa hay (dry), barley, corn (grain), corn (silage), oats, potatoes, spring wheat, sugarbeets and winter wheat. Although other crops are grown in the area, the nine crops examined account for the greatest percentage of harvested acres within the region. Acres harvested were obtained from data available from the National Agricultural Statistics Service (NASS) www.nass.gov.

Figure 1 – Idaho Counties

Irrigated versus non-irrigated acres
Many crops in the south central region are grown only with the help of irrigation. Exception are barley, spring wheat and winter wheat which have irrigated and non-irrigated acreage. Figure 3 shows that over time there has been a general decrease in non-irrigated production of these three crops and an increase in irrigated production. Figure 3 indicates three important points relevant to the period after 1972. First, irrigated production of these crops was more popular than non-irrigated production. This was more apparent in 1994 as there was a big gap between irrigated and non-irrigated production of barley, winter wheat and spring wheat. At this time, irrigated acres harvested for these crops were between 80,000 to140,000 acres while non-irrigated acres for these crops were less than 20,000 acres. While this gap has been getting smaller and smaller over the last decade, irrigated production was still preferred over non-irrigated production in 2008. Second, although the acres harvest differed between irrigated and non-irrigated production of barley, winter wheat and spring wheat, the growth patterns were very similar for both. Third, irrigated barley production increased at a more rapid pace after 1972 establishing a large difference in 1984. However, this difference in acres harvested had been declining over the time and disappeared in 1996.

Figure 2. Total harvested acres of Nine Major Crops – South Central Region 1938-2009

Historical Cropping Patterns
Figure 2 shows the total harvest acres of the nine major crops (by acres harvested) in the south central region of Idaho. Barley, winter wheat and spring wheat account for the largest harvested acreage within the South Central Region of Idaho until 1998 when the data suggest that harvested acres of alfalfa became the dominant crop by area. It is unclear from the data whether alfalfa was grown in the area prior to 1988 without making additional enquiries to NASS. The data available suggested that acres of winter wheat, spring wheat and barley started to decline in the late 1980’s as production of oats and alfalfa hay increased. Spring Wheat production increased between 1942 and 1952, declined during 1952-1968, rose again for more than a decade and eventually declining and settling at 49,500 in 2009. Barley production rose consistently until 1982, reached its peak level and eventually came down settling at 133,000 acres in 2009. Winter Wheat production increased between until 1942 and 1952, experienced intermittent positive growth till 1996 and eventually decreased to approximately 86,600 acres in 2009.

Figure 3. Total harvested acres of barley, spring wheat and winter wheat by irrigated and non irrigated acres

Figure 4. Percent of total harvested acres irrigated and non-irrigated
Figure 4 more clearly shows the changes in irrigated and non-irrigated harvest of barley, spring wheat and winter wheat over time. The most dramatic change occurred in winter wheat production which has seen a dramatic decline in non-irrigated production and an increase in irrigated production. Irrigated acres far exceed non-irrigated acres of winter wheat. Since the mid 1980’s irrigated winter wheat accounts for more than 70 percent of winter wheat acreage. Irrigated spring wheat acreage also seems to have trended up slightly over time however this is not a clear pattern and required further analysis. With some exceptions during the 1950’s and 1960’s, more than 70 percent of barley production has been irrigated.