

# OKLAHOMA - PICARDY



**Wheat culture  
and commercialization.**



I thank Monsieur le Rrecteur de l'académie d'Amiens, chancelier des universités and Mister SIMMONDS for the great opportunity they gave me to make this fabulous trip for my researches.

Thank you to Madam. ROBILLARD and Madam. BOUICHOU who did so many things before and during our stay so that we can take advantage at most of all the historic, natural, artistic, cultural wealth that Oklahoma owns and Madam Hurtelle, my English teacher who help me for my report.

I am also anxious to thank all the persons who helped me for my researches in Picardy and in Oklahoma:

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*First part:*

***GENERAL  
PRESENTATION***

## *I Origin of the State:*

Formed by the combination of Oklahoma Territory and Indian Territory on November 16, 1907, Oklahoma was the 46th state to enter the union.

Its residents are known as *Oklahomans* or, informally, "Okies" or "Sooners", and its capital and largest city is Oklahoma City.

The name *Oklahoma* comes from the Choctaw phrase *okla humma*, which literally mean: *red people*. It was a Choctaw Chief who suggested the name in 1866 during treaty negotiations with the federal government regarding the use of Indian Territory, in which he envisioned an all-Indian state controlled by the United States Superintendent of Indian Affairs. *Oklahoma* later became the de facto name for Oklahoma Territory, and it was officially approved in 1890, two years after the area was opened to white settlers

## *II Geography:*



Arkansas and Missouri bound it on the east, on the north by Kansas, on the northwest by Colorado, on the far west by New Mexico, and on the south by Texas.

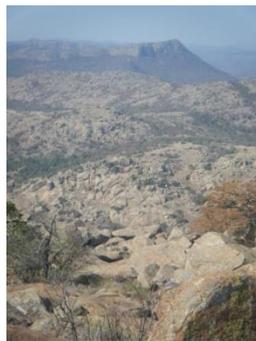
Oklahoma is the 20th-largest state in the United States, covering an area of 69,898 square miles. It is length to 478 miles, east to west and width to 231 miles north to south.



Oklahoma is a land of flat, fertile plains and low hills. Oil and natural gas wells can be seen throughout much of the state. Oklahoma's plains also host large herds of cattle and vast wheat fields.



The Wichita Mountains are located in the southwestern portion of the U.S. state of Oklahoma. The eastern end of the mountains offers 1,000 feet of topographic relief in a region otherwise dominated by gently rolling grasslands



The mountains are home to numerous working ranches and quarry operations, the state reformatory, recreational homes and campsites, and scenic parklands. Fort Sill, home of the U.S. Army Field Artillery School, occupies a large portion of the southeastern end of the mountains.

### **III Weather**

Oklahoma is in a temperate area of the country. The state sometimes sees extreme temperatures and rain that is commonly found in a continental climate. All of the state frequently has temperatures above 100 °F or below 0 °F.

It snows in Oklahoma. In the northwest near the Colorado border, the area can get nearly 30 in, in snowfall during the winter. The southeastern part of the state usually gets less than 2 in, in snowfall.

Most of the state is in an area known as Tornado Alley. This is because there is a lot of contact between cold and warm air masses which makes severe weather. Oklahoma has an average of 54 tornadoes each year. This is one of the highest rates in the world.[http://simple.wikipedia.org/wiki/Oklahoma - cite note- Annual average number of tornadoes-39](http://simple.wikipedia.org/wiki/Oklahoma_-_cite_note-Annual_average_number_of_tornadoes-39) The state is home to the National Storm Prediction Center of the National Weather Service, located in Norman.

#### **IV Economy:**

Cotton, formerly the leading cash crop of Oklahoma, has been succeeded by wheat; income from livestock, however, exceeds that from crops.

Many minerals are found in Oklahoma, including coal, but the one that gave the state its wealth is oil. Oil and gas have declined somewhat in importance today. Many of Oklahoma's factories process local foods and minerals, but its chief manufactures include nonelectrical machinery and fabricated metal products.



Military bases and other government facilities are also important.



#### **V Agriculture:**

The 27th-most agriculturally productive state, Oklahoma is fifth in cattle production and fifth in production of wheat. Approximately 5.5 percent of American beef comes from Oklahoma, while the state produces 6.1 percent of American wheat, 4.2 percent of American pig products, and 2.2 percent of dairy products

The state had 83,500 farms in 2005, collectively producing \$4.3 billion in animal products and fewer than one billion dollars in crop output with more than \$6.1 billion added to the state's gross domestic product. Poultry and swine are its second and third-largest agricultural industries.

Oklahoma's plains also host large herds of cattle and vast wheat fields. We can find animals as prairie dogs, American bison, coyotes, white-tailed deer



### **VI Anthem:**

The state of Oklahoma officially adopted the song as its state song in 1953. It is the only official state song from a Broadway musical!



These are the lyrics:

Oklahoma

Where the wind comes sweeping down the plain  
And the waiving wheat can sure smell sweet  
When the wind comes right behind the rain

Oklahoma

Every night may honey lamb and I  
Sit alone and talk and watch a hawk  
Making lazy circles in the sky

You know we belong to the land  
And the land we belong to is grand  
So when we say: "Yip I Y yip I Yop I Yeah "

We are only saying: "You are doing fine Oklahoma! Oklahoma! OK! "

**VI History:**

Set aside as Indian Territory in 1834, the region was divided into Indian Territory and Oklahoma Territory on May 2, 1890. The two were combined to make a new state, Oklahoma, on Nov. 16, 1907.

***1) Native Americans***

Oklahoma's Native American population is the largest in the nation.

Native Americans are divided in different tribes. Five of them are considered as civilized: the Cherokee, Chickasaw, Choctaw, Creek, and Seminole.

**Cherokee**

The Cherokees came from the Northeast and settled in the mountain regions. Cherokee life changed as Native Americans began to trade with the new settlers. The Cherokee tribe called themselves as " Aniyunwiya" which means, 'The Principle People.'

The Cherokee tribes lived in joint family, which belongs to an even larger family called 'Clan.' There were seven main clans in their tribes, namely Bird, Wolf, Deer, Wild potato, Long Hair, Blue, and Paint. After marriage, the man moved to the woman's house to be a part of her family. A Cherokee child would assume different names during the course of his or her life. Their names were like sun, moon, sky, star, earth, etc, which meant, they used to call their children with the nature's names.

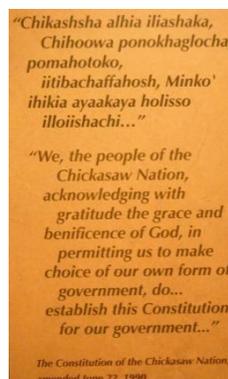
The rivers gave them fish to eat, water to drink, and bathe. The fields and forests surrounding their village were free for anyone to hunt in. Each village had two chiefs, one for peace and one for war. The White Chief or the Peace Chief was always dressed in white and the Red Chief or the War Chief was dressed in red clothes. Each of them had seven clan members to help them, carry out their duties.

Fishing and hunting were the main occupation of the Cherokee man, apart from cultivating corn. There were no formal schools for children, but they learnt the Cherokee history from their parents and relatives. These stories were fun to hear, and taught lessons of good manners and behavior. Women helped in harvesting corn and in painting. They also helped in building the summer and the winter houses. They would also cook; make baskets, and clay pots. Girls helped their mothers in all the earlier mentioned works. Boys were too busy learning the skills, which needed to make them strong Cherokee warriors. They were taught to hunt, fish, and to make bows, arrows, arrow heads, and blow guns.

The Cherokee had no written language until 1821. A chief named Sequoya created the Cherokee syllabary. A syllabary is kind of alphabet made up of sets of syllables rather than letters.

## **Chickasaw**

The **Chickasaw** are originally from the Southeastern United States as Mississippi, Alabama, Tennessee.



The Chickasaw tribe has its own government, laws, police, and services, just like a small country. However, the Chickasaws are also US citizens and must obey American

law. In the past, the Chickasaw tribe was ruled by a council of hereditary clan chiefs, led by a *minko*, or war chief, who made military and political decisions for the whole tribe. Today, the Chickasaw councilmembers and governor are popularly elected and the headquartered is located in Ada, Oklahoma

The tribe owns 17 casinos including Riverwind casino in Norman, two bingo halls, 17 tribal smoke shops, seven motor fuel outlets, and a truck stop.

Chickasaw men were hunters and sometimes went to war to protect their families. Chickasaw women were farmers and also did most of the child care and cooking. Both genders could succeed at storytelling, artwork and music, and traditional medicine. In the past, Chickasaw chiefs were always men, but today a Chickasaw woman can be chief too.

The Chickasaw Indians were farming people. Chickasaw women did most of the farming, harvesting crops of corn, beans, squash, and sunflowers. They also gathered wild plants such as nuts, berries, plums, and herbs. Chickasaw men did most of the hunting, shooting deer, wild turkeys, and small game and fishing in the rivers and along the coast. Chickasaw dishes included cornbread, soups, and stews cooked on stone hearths. The Chickasaws also enjoyed tea.

There are lots of traditional Chickasaw legends and fairy tales. Storytelling is very important to the Chickasaw Indian culture. Here is a story about the origin of the Chickasaw Nation.

### **Creek**

The Muscogee also known as the Creek are traditionally from the southeastern United States.

### **Choctaw**

The Choctaw Nation is a Native American homeland comprising twelve tribal districts. The Choctaw Nation maintains a special relationship with both the United States and Oklahoma governments. Approximately 250,000 people live within the Choctaw Nation.

### **Seminole**

The Seminoles came from Florida. The Seminole nation came into existence in the 1700s, and was composed of both Indians from Georgia, Alabama, Mississippi, and Florida,

The history of the Seminole Nation of Oklahoma began when Spain first occupied the peninsula known as Florida. They remaining in Florida fought against US forces today, they have independence over their tribal lands, and an economy based on tobacco, tourism and gambling.

The Seminole General Council, is composed by the Principal Chief and Assistant Chief, serves at the elected governing body. The Chief and Assistant Chief are elected at large every four years.

In 1819 a treaty with Spain defined Oklahoma as the southwestern boundary of the United States. The U.S. government invited the Cherokee of Georgia and Tennessee to move into the area, and a few had come to settle. Soon intense white pressure for their lands, with the approval of President, forced the Five Civilized Tribes to abandon their old homes east of the Mississippi and to take up residence in what was to become the Indian Territory. Their tragic removal is known as the Trail of Tears. They settled on the hills and little prairies of the eastern section and built separate organized states and communities.

The Trail of Tears is a name given to the forced movement of Native American nations from southeastern parts of the United States. They come from Florida, Georgia,...

They had to walk to these during the winter without food, medicine,...to Oklahoma. The government hoped unofficially most of them died. It is a kind of genocide.

## ***2) The Oklahoma Land Rush***

The Oklahoma Land Rush of 1889 was the first land run into the Unassigned Lands. The land rush started at midday on April 22<sup>nd</sup>, 1889

Around 50,000 people lined up for their piece of the available two million acres.

The Unassigned Lands were considered some of the best unoccupied public land in the United States. The Indian Appropriations Bill of 1889 was passed and signed into law with an amendment by Illinois Representative William McKendree Springer that authorized President Benjamin Harrison to open the two million acres for settlement.

A number of the individuals who participated in the run entered early and hid out until the legal time of entry to lay quick claim to some of the most chosen homesteads. These people came to be identified as "Sooners". While some people think that the settlers who entered the territory at the legally appointed time were known as "boomers".



The University of Oklahoma's fight song, "Boomer Sooner", derives from these two names. And the custom wants that when someone shout "Boomers" in the university, some other persons are going to answer "Sooners" and mutually!

It is possible to look at *Far and away* starring Nicole Kidman and Tom Cruise a movie which show very well this historical event.

Some elementary schools replay the scene of the rush in the Unassigned Lands. Students are disguised as people were dressed at that time and they choose when they want to go on the playground as their ancestors did for the Unassigned Lands. But it is very controversial because for the Native Americans, it is the end of their control on lands.

### 3) Black Wall street and Tulsa Race Riot



African Americans who were segregated on the south States decided to come to Oklahoma because Native Americans didn't practice segregation. Oklahoma represented change and provided a chance for African Americans to get away from slavery and the harsh racism of their previous homes.[http://en.wikipedia.org/wiki/Greenwood,\\_Tulsa,\\_Oklahoma](http://en.wikipedia.org/wiki/Greenwood,_Tulsa,_Oklahoma) - cite note-history-0 Oklahoma offered hope and provided all people with a chance to start over. They traveled to Oklahoma by wagons, horses, trains, and even on foot.

They lived in Tulsa and became powerful because they were lawyers, bank men, businessmen, This community later acquired the name Greenwood and by 1921 it was home to about 10,000 African American men, women, and children

A couple of years later, a contradictory situation appeared: African Americans were richer than Americans. The Americans disagreed with this situation; they were waiting for an occasion to declutch a riot.

Moreover, during the First World War, Black soldiers saw the "black way of life "in Europe without segregation. They didn't accept their conditions in America and they learnt how to use arms.

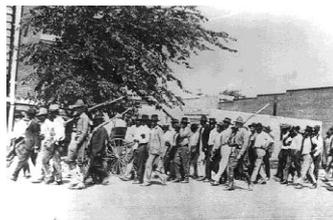
It happened in an elevator in May 31st, 1921. A black man named Dick Rowland, stepped into an elevator in the Drexel Building operated by a woman named Sarah Page. Suddenly, a scream was heard and Rowland got nervous and ran out. Rowland was accused of a sexual attack against Page. One version of the incident holds that Rowland stepped on Page's foot, throwing her off balance. When Rowland reached out to keep her from falling, she screamed. The next day, Rowland was arrested and held in the courthouse lockup.

The *Tulsa Tribune*, a popular newspaper in Tulsa, broke the story in that afternoon's edition with the headline: "Nab Negro for Attacking Girl In an Elevator", describing the alleged incident.



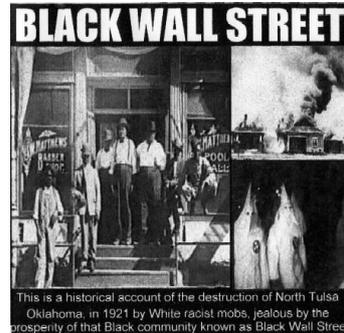
The gunshots triggered an almost immediate response by the white men, many of whom returned fire on the blacks, who continued firing back at the whites. Many prominent Tulsa whites also participated in the riot, including Tulsa founder and Ku Klux Klan members.

Greenwood was on fire, everything was destroyed (homes, churches, shops,...).



During the 16 hours of the assault, over 800 people were admitted to local hospitals with injuries; more than 6,000 Greenwood residents were arrested. We

estimated 10,000 were left homeless, and 35 city blocks composed of 1,256 residences were destroyed by fire. Official counts put the number of dead at 39: 26 black, 13 white. There were estimates that up to 300 blacks were killed. And many women and children were regrouped and put into train to go to other state.



## VII OKLAHOMA CITY:

Oklahoma City is the largest city and capital of Oklahoma.

The city was founded during the Land Run of 1889, and grew to a population of over 10,000 within hours of its founding.

### 6) *Bricktown*



There is a water canal in the Bricktown entertainment district. Water taxis transport passengers within the district.



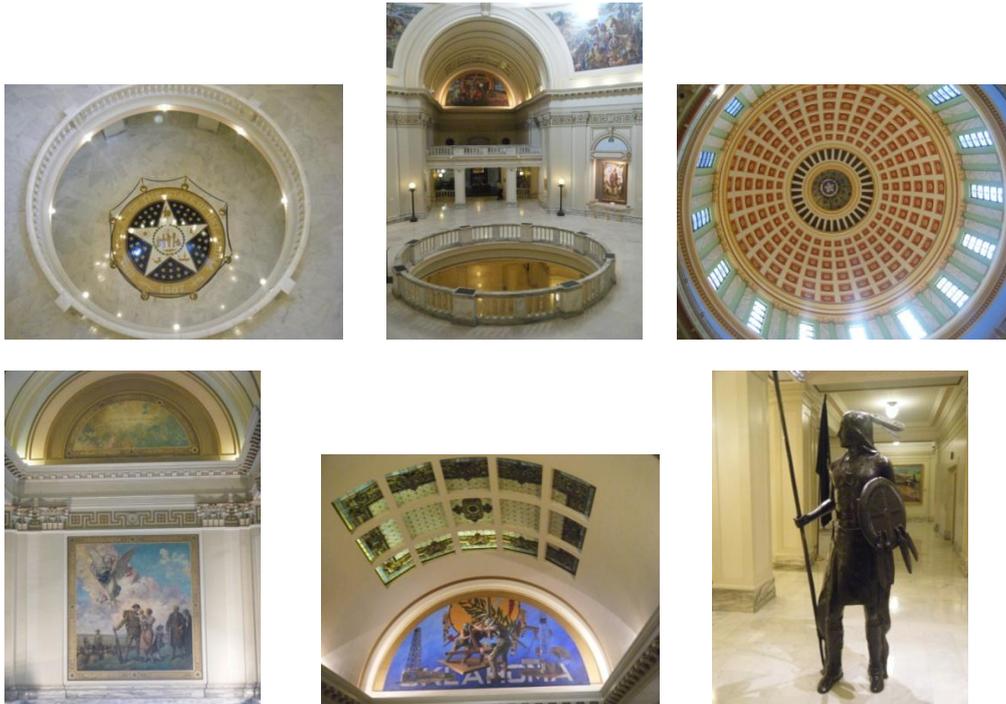
## 7) Oklahoma State Capitol



The Oklahoma State Capitol is the house of government of the U.S. state of Oklahoma. The state capitol campus is famous for its oil wells and remains the only state capitol grounds in the United States with active oil rigs. Oklahoma's first capitol was originally located in the city of Guthrie Oklahoma's newly established state government had an election to decide where the capitol should be located. As a result, on June 11, 1910, the state seal was taken from Guthrie and moved south to Oklahoma City

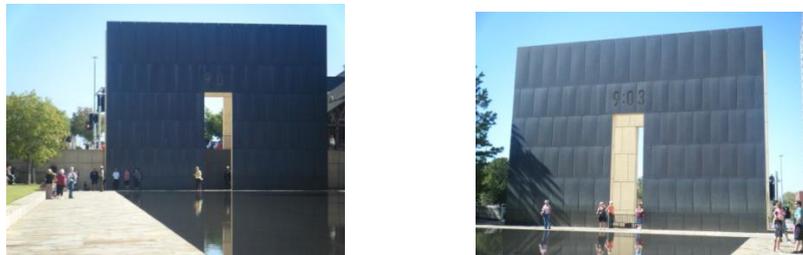


In the Oklahoma Capitol Sate, there are Supreme court, Senate and House of representatives.



### ***8) Bombing attack***

The city was the scene of the April 19, 1995 bombing attack of the Alfred P. Murrah Federal Building, in which 168 people lost their lives. The site has been commemorated as the Oklahoma City National Memorial and Museum



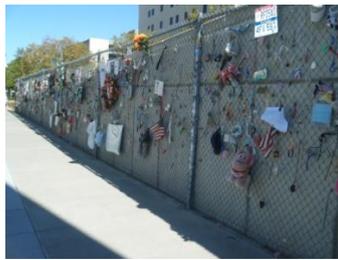
These monumental twin gates frame the moment of the destruction-9:02a.m-and mark the formal entrances of the memorial.

The East Gate represents 9:01a.m on April 19<sup>th</sup>, and the innocence of the city before the attack. The west Gate represents 9:03a.m., the moment we changed forever, and the hope that came from the horror in the moments and days following the bombing.

The pool occupies what was once N.W. Fifth Street. Here, a shallow depth of gently flowing water helps soothe wounds, with calming sounds providing a peaceful setting for quiet thoughts.



Each of 168 chairs symbolizes a life lost, with smaller chairs representing at the 19 children killed. Arranged in nine rows, one for each of the nine floors of the building, they are placed according to the floor on which those killed were working or visiting. Each bronze and stone chair rests on a glass base etched with the name of a victim. By day, the chairs seem to float above their translucent bases. By night, the glass bases illuminates as beacons of hope.



Every year on April 19, survivors, families and friends return to the memorial to read the names of each person lost.

## 9) *Sonic*

Oklahoma City is home to the headquarters of Sonic, whose office building and restaurant is located in Bricktown.



### ***10) Westmoore High School***

Westmoore High School was established in 1988. It is a four-year comprehensive public high school located in south Oklahoma City.



Its address is :  
Westmoore High School  
12613 South Western  
Oklahoma City, OK 73170

In Westmoore, classes star at 7.10 am and finish at 3.02 pm



The High School mascot is Jaguars. And its colors are: Red/Black/Silver.



The AP Courses Offered are:

- |                               |                             |
|-------------------------------|-----------------------------|
| AP Biology                    | AP Physics, B and C         |
| AP Calculus, AB and BC        | AP French IV, V             |
| AP Chemistry                  | AP Spanish IV               |
| AP Language and Composition   | AP Music Theory             |
| AP Literature and Composition | AP Psychology               |
| AP Environmental Science      | AP 2-Dimensional Studio Art |
| AP United States Government   | AP Human Geography          |
| AP United States History      | AP World History            |



### 11) Oklahoma University

The University of Oklahoma which is also named OU is located in Norman, a city close to Oklahoma City. It was founded in 1890. David Boren has served as President of the University of Oklahoma since 1994.



In 2007 the university had 29,931 students enrolled, It employed nearly 3,000 faculty members.

The school offers 152 baccalaureate programs, 160 master's programs, 75 doctorate programs, and 20 majors at the first professional level.

Located on its Norman campus are two prominent museums, the Fred Jones Jr. Museum of Art, specializing in French Impressionism and Native American artwork, and

the Sam Noble Oklahoma Museum of Natural History, specializing in the natural history of Oklahoma.



. In the oldest building, there is the main library in which it is possible to find old, rare and famous books. And there are also all doctorates thesis written by students around the room



Oklahoma University is well known for its athletic programs. The football team has won 7 NCAA Division I National Football Championships.[http://en.wikipedia.org/wiki/University\\_of\\_Oklahoma](http://en.wikipedia.org/wiki/University_of_Oklahoma) - cite note- [Schools with the Most NCAA Championships-11](#) And when they beat the Texas football team the date is written on a campus street. Its nickname is " Sooners" .





*Second part:*

***WHEAT CULTURE  
AND  
COMMERCIALIZATION***

*I Wheat culture:*

Wheat is a grass that is cultivated worldwide. Globally, it is the most important human food grain and is second only to maize in total production.

Wheat is the number one crop grown in Oklahoma. Most of the wheat grown here is hard red winter wheat. This is the kind of wheat that grows best in our climate and in states like Kansas, Colorado and Texas. Hard red winter wheat is used mostly to make bread.

Red winter wheat is planted and grows in some specific territories in Oklahoma, especially in the west part of the state.



Oklahoma ranks 4<sup>th</sup> in the nation in the production of winter wheat and produce more than 166.5 million bushels in 2008.

**RANK AND VALUE OF PRODUCTION, OKLAHOMA COMMODITIES, 2004-2007**

Item	2004		2005		2006		2007		National Rank
	Rank	Value (Million Dollars)							
Cattle & Calves	1	1,942	1	2,187	1	2,111	1	2,022	4
Poultry & Eggs	2	634	3	638	2	553	2	623	14
Winter Wheat	4	546	4	434	4	384	3	610	4
All Hay	5	340	3	335	5	355	4	555	9
Hogs & Pigs	3	356	3	610	3	317	5	540	8
Milk Production	6	221	6	201	6	180	6	239	26
Corn for Grain	7	76	8	69	7	73	7	159	23
Cotton & Cottonseed	8	66	7	90	8	93	8	97	12
Grain Sorghum	12	23	12	21	12	22	9	48	6
Soybeans	9	50	9	43	10	23	10	47	25
Floriculture	11	30	10	30	9	30	11	30	
Peanuts	10	39	11	29	11	22	12	22	5
Peas/beans	13	19	13	19	13	11	13	14	7
Rye	14	7	15	6	14	4	14	7	1
Watermelon	15	6	14	7	15	3	15	6	11
Sheep & Lambs	16	4	16	4	16	3	16	3	24
Cuts	18	1	18	1	18	1	17	2	24
Peaches	17	2	17	2	17	2	18	1	21
<b>Total Value</b>		<b>4,584</b>		<b>4,726</b>		<b>4,307</b>		<b>5,049</b>	

**Rank and Value of Production Oklahoma Commodities, 2006-2009**

Item	2006		2007		2008		2009		National Rank		
	Rank	Value (Million Dollars)									
Cattle & Calves	1	2,059	1	2,002	1	1,939	1	1,747	4		
Poultry & Eggs	2	553	3	635	3	688	2	653	15		
All Hay	3	355	2	355	3	553	3	553	10		
Hogs & Pigs	3	517	5	509	4	514	4	494	8		
Winter Wheat	4	384	4	610	2	1,154	5	370	6		
Milk Production	6	189	6	239	6	234	6	152	26		
Corn for Grain	7	73	7	139	7	164	7	128	27		
Cotton & Cottonseed	8	53	8	97	9	70	8	118	13		
Soybeans	10	23	10	47	8	82	8	113	25		
Grain Sorghum	12	22	9	48	10	46	10	41	6		
Peanuts	11	22	12	24	13	5	11	14	6		
Carrots									12	9	2
Peanut Oil	13	11	13	14	11	16	13	9	9		
Rye	14	4	14	7	12	7	14	5	1		
Watermelon	15	3	15	6	14	4	15	3	13		
Sunflowers									16	3	9
Sheep & Lambs	16	3	16	3	15	3	17	3	25		
Dates	18	1	17	2	16	1	18	1	24		
<b>Total Value</b>		<b>4,309</b>		<b>4,998</b>		<b>5,410</b>		<b>4,353</b>			

The most common varieties of hard, red winter wheat planted by Oklahoma producers are Jagger, Endurance and Overlay..

In 2003, Oklahoma ranked number two in the nation in the production of hard red winter wheat.

Wheat is grown on more land area worldwide than any other crop and is a close third to rice and corn in total world production. In 2004, world wheat production was approximately 624 million tons.

In 2004 the world leaders in wheat production were China (91.3 million tons), India (72 million tons), United States (58.8 million tons), Russia (42.2 million tons), France (39 million tons) and Australia (22.5 million tons).

Wheat supplies about 20 percent of the food calories for the world's

people and is a national staple in many countries. In Eastern Europe and Russia, over 30 percent of the calories consumed come from wheat. About 1/3 of the world's people depend on wheat for their nourishment.

The per capita consumption of wheat in the United States exceeds that of any other single food staple

### 3) History of Wheat

Domestic wheat originated in southwest Asia in what is now known as the Fertile Crescent. The oldest archaeological evidence for wheat cultivation comes from Syria, Jordan, Turkey, Armenia, and Iraq. Around 9000 years ago, wild einkorn wheat was harvested and domesticated in the first archaeological signs of sedentary farming in the Fertile Crescent.



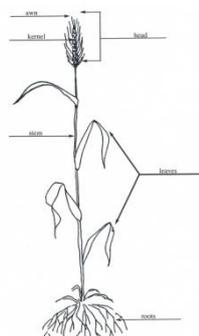
Around 8,000 years ago, a mutation or hybridization occurred within emmer wheat, resulting in a plant with seeds that were larger but could not sow themselves on the wind. While this plant could not have succeeded in the wild, it produced more food for humans. In cultivated fields this plant out competed plants with smaller, self-sowing seeds and become the primary ancestor of modern wheat breeds.

Columbus packed wheat on his ships on his second voyage to the New World.

While wheat was grown in the United States during the early colonial years, it was not until the late 19th century that wheat cultivation flourished, owing to the importation of an especially hardy strain of wheat known as Turkey red wheat. Russian immigrants who settled in Kansas brought Turkey red wheat with them.

### 4) Growing Wheat

The wheat plant :



Unlike most other crops, hard red winter wheat is planted in the fall and harvested in the spring.

The wheat is handled with an insecticide and a pesticide before being planted.



In the summer, wheat producers prepare the soil for planting. They drive a tractor that pulls the plow through the fields. The plow turns the soil over and kills all the weeds. Then the farmer connects the tractor to a disk harrow and drives it over the field. The disk harrow breaks the soil down into smaller pieces. When the soil is ready for planting, the farmer uses a grain drill to plant the seed.



The wheat plant will grow about six inches before the frost comes. Each plant grows by producing more leaves and new stalks from the base of the plant. The new stalks are called "tillers."

When the weather gets cold the tiller will stop growing. This is called " the dormant period".

In the spring, the warm moist days make the wheat plants grow quickly. As the wheat comes out of its dormant period, more tillers of wheat emerge. Each tiller can form another head of wheat.

Some varieties of wheat grow as tall as seven feet, but most are only between two and four feet tall.

During the early summer, the plants begin to fade from dark green to tan and then to a golden brown. Then the wheat is ripe and nearly ready for harvest. Now the wheat producer must race with the weather to get the wheat out of the fields.

Some years the wind and rain keep the plants from ripening, and they cannot be harvested. Other years hail may break all the heads or a lightning storm may start a range fire.

When the weather cooperates, and the wheat is ripe, the farmer must move fast. He checks the wheat by rubbing a wheat head between his hands, blowing the chaff away and then chewing some of the grain. If the kernels crack easily and get soft as they are chewed, the wheat is ready to harvest.

Farmers use huge combines to harvest their wheat.



A combine removes the wheat head from the stalk and the kernels from the wheat head. Kernels travel from the field by truck to storage bins. Kernels may be dried and stored on the farm or may go to nearby grain elevators. Wheat must be dried to prevent mold and spoilage.

It takes a combine nine seconds to harvest enough wheat to make 70 loaves of bread.

A kernel is a wheat seed. There are about 50 kernels in a head of

wheat and 15,000 to 17,000 kernels in a pound.

Both whole wheat flour and all-purpose white) flour are made from kernels of wheat. A wheat kernel is divided into three major parts—bran, endosperm and germ. All purpose flour is made from only ground endosperm. Whole wheat flour is made by grinding the entire wheat kernel.

The wheat is stored to be reused as seed next year. And the rest is sold to the cooperative.



Few of farmers use the irrigation because that is very expensive and because the authorization is very difficult to obtain.

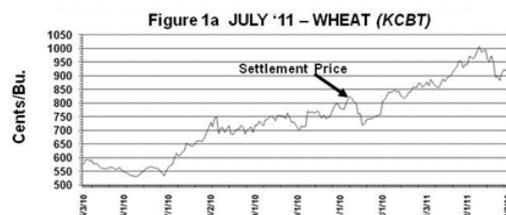
It is the same thing for the subsidies of the government. There exist but they are complicated to obtain it is necessary pass many of time to complete dodder and most of them prefer to spend time in their farm to be worked.

Farmers rarely have assurances for their crops because they are very expensive and later they make less profit on their harvests. So they have to keep some money aside to survive when there is a year of drought or a year when the harvests is bad.

Most of farmers think you need to be son's or daughter's farmers to survive because if you don't own fields, machineries, it's almost impossible.

## **II Wheat commercialization:**

Wheat is Oklahoma's most valuable agriculture export. A wheat bushel (around 60 pounds) cost 7.25 \$ now but the price changes every time so farmers sell their crop by small quantity.



#### 4) Wheat Processing

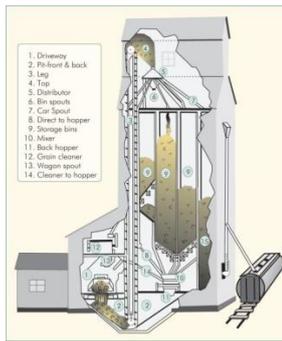
Workers at the grain elevator help empty the wheat into a very deep pit. Machinery in the grain elevator raises, or elevates, the wheat into a tall bin.

In many small towns in Oklahoma, the grain elevator is the tallest building in the town.

The wheat stays in the grain elevator until the farmer is ready to sell it. Workers keep an eye on the wheat kernels to make sure they stay cool and dry. If the wheat kernels get wet or too hot they will spoil.

Some of the wheat is sold to people who use it to make food for people and animals. The rest is cleaned and saved until it is time to plant again.

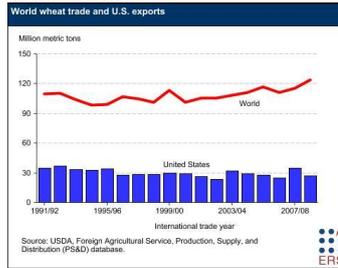
One kernel of wheat can grow several hundred new kernels next harvest.



#### 5) Wheat in the international trade

International trade is defined as the exchange of goods and services across international boundaries or territories. This trade represents a significant share of the Gross domestic Product (GDP) for most countries. While international trade has been present throughout much of history, its economic, social, and political importance has been on the rise in recent centuries, due, in large part, to industrialization, advanced transportation, globalization, multinational corporations, and outsourcing. Trade and marketing are vital to American agriculture.

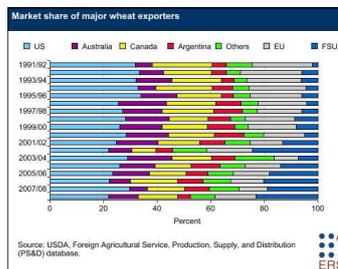
The U.S exports agricultural products to countries that can't grow crops and livestock as efficiently as American farmers or can't grow them at all, due to their lack of space, viable soil, or climate restrictions.



The U.S also imports products from other countries that produce different, less expensive, or better quality goods. Government trade policies influence the volume of trade between nations.

In domestic trade, goods may move freely from one part of the nation to another. In international trade, governments often place artificial barriers against the free movement of goods from one country to another. Several organizations control fair trading between the U.S and other countries.

The United States is the world's leading wheat exporter. The largest export of wheat was to Egypt, with 876,409 tons shipped. Generally, the U.S, Canada, Australia, the European Union, and Argentina account for over 70 percent of world wheat exports.



The diversity of exporting countries provides significant stability toward wheat trade and prices. In the Northern hemisphere, most of the wheat production is grown as winter wheat. Parts of Canada, Russia, and the United States have large spring wheat production, which is planted much later in the crop year. Other countries, like Australia and Argentina in the Southern hemisphere, plant winter wheat after the Northern hemisphere's spring wheat. With wheat being planted and harvested at different times, a shortfall in one area of the world can be quickly responded to by other wheat-producing areas.

## 6) Uses for Wheat

Besides being a high carbohydrate food, wheat contains valuable protein, minerals, and vitamins. Wheat is an efficient source of protein, when balanced by other foods that supply certain amino acids such as lysine.

Wheat is the major ingredient in most breads, crackers, cookies, biscuits, cakes, doughnuts, muffins, pancakes, waffles, noodles, piecrusts, ice cream cones, macaroni, spaghetti, puddings, pizza, and many prepared hot and cold breakfast foods.



Much of the wheat used for livestock and poultry feed is a by-product of the flour milling industry.

Wheat is also used for fermentation in making alcoholic beverages

In less-developed countries, straw can also be used as a construction material for roofing thatch.

Wheat straw is used for livestock bedding. The green forage may be grazed by livestock or used as hay or silage. In many areas of the southern Great Plains, wheat serves a dual purpose by being grazed in the fall and early spring and then harvested as a grain crop.

#### *Facts About Bread :*



Wheat, rye, corn, barley, millet, kamut and spelt are some of the grains used around the world. Wheat flour is preferred because of its

gluten content. Gluten is what gives bread its elastic quality.

In France the shortage of bread helped start the French Revolution.

- It takes nine seconds for a combine to harvest enough wheat to make about 70 loaves of bread.
- An acre will produce enough wheat for about 2,500 loaves of wheat bread.
- Bread is probably the one food eaten by people of every race, culture and religion.
- One family of four can live 10 years off the bread produced by one acre of wheat.

*Other Wheat Foods :*



Bulgur

The oldest recorded use of wheat is in the form of bulgur. Bulgur is made by soaking and cooking the whole wheat kernel, drying it and then removing part of the bran and cracking the remaining kernel into small pieces. Its uses are numerous from salads to soup, from breads to desserts. It is a nutritious extender and thickener for meat dishes and soups.



Wheat Germ

The germ of the wheat kernel is often added to baked goods, casseroles and even beverages to improve the nutritional value and give a nutty, crunchy texture. The protein quality of wheat germ is very comparable to that of milk.



Wheat Bran

The bran is the outer layer of the wheat kernel, often used for animal feed. It also makes a nutritious addition to baked goods, because it is a good source of fiber and is high in B vitamins, protein and iron.



Wheat Berry

The wheat berry is another name for the wheat kernel. The cooked whole kernel can be used as a meat extender, breakfast cereal or salad and baked dishes.



Cereal

Many commercial cereals on the market are made from wheat and can be eaten as a snack, breakfast cereal or added to baked products.. The wheat may be shredded, puffed, flaked or rolled. The bran may be in the form of flakes or granules.

## Agricultural High School in Oklahoma and in Picardy.

### I In Oklahoma

The High School receive any money from the City, the Sate, the Country . So to earn money for maintaining the High School, they grow flowers in a greenhouse and they sell them.



In their formation, students have to bring up an animal. They can choose which one they prefer: a goat, a pig, a cow or a sheep. They must feed it twice a day, clean the place where they live,.... Sometimes, they ask some help to their family, their friends for that.



As they can't run through meadows, animals have to stay 30 minutes on a travelator to do some physical exercise.



A few years ago, the High School was touched by an hurricane and a part of a building was destroyed.



## **II In Picardy: Paraclet High School**

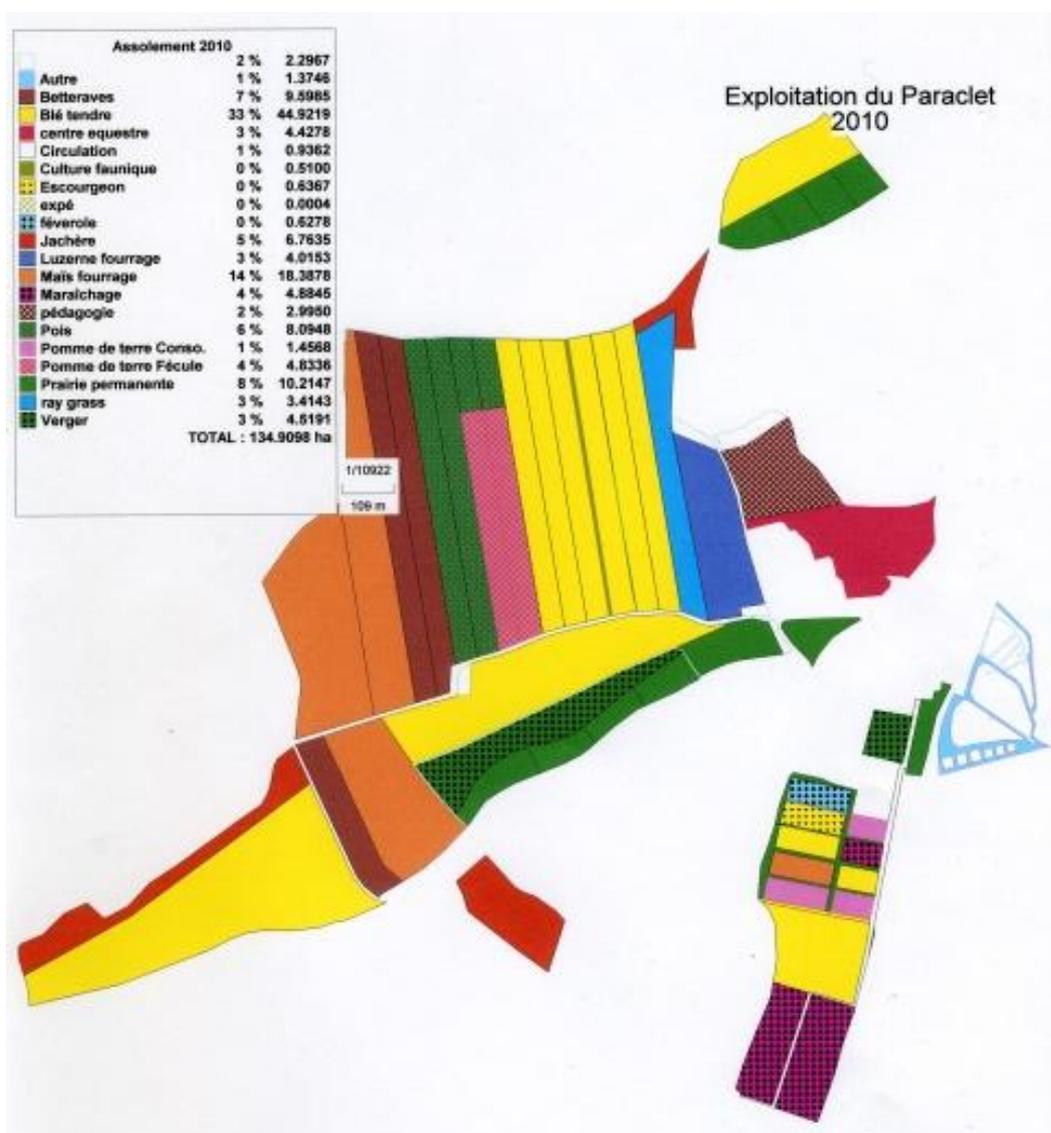


Since 1886, Paraclet High School forms generations of students in the jobs by the agriculture, the farming, by the food-processing industry and by the development.

Paraclet proposes the following formations:

- Development
- Agricultural production
- Transformation in biology and food-processing industry
- Management of waters and development of the rural space
- Marketing of foodstuffs.

The Paraclet farm was founded in 1885.



*Rotation of crops in the farm in 2010*

There are different kinds of cows:

- *Prim'Holstein*
- *Flamandes*
- Nantaise which are bought up near to Samara



The High School grows some wheat, beets, pea, corn silage, colza, meadows, fallow ... And also a biological orchard and with these apples, some cider is making with.



Students can help in the farm but they aren't responsible of it. Four persons work for the farm: a manager, a cowherd and a responsible of the fields and an apprentice . Some of them have to pass a day into for their formation.

There is any relation between the fact that parents should be farmers: on average only 22.1 % of the students have a relative who is farmer. However, generally, boys are more numerous than girls.

**Some Oklahoman songs:**

This land is your land

This land is my land

From California to the New York island

From the red wood forest to the of stream waters

This land was made for you and me.

And I was walking a ribbon of highway

I saw above me and endless skyway

I saw below me a golden valley

This land was made for you and me .

***Woody GUTHRIE***

