## NATIONAL COLLEGE BARBU STIRBEI – CALARASI ROMANIA

# **COMENIUS PROJECT**

# WEATHER CALENDAR

#### Visit to the weather forecast station

On 10<sup>th</sup> of January 2005 we went to the weather forecast station from Calarasi. From here all the temperatures from the south frontier are sent to NMA. Here we saw all kind of devices from the traditional thermometer or crystal globe to modern methods as solar panels. All the things there fascinated us. We are flabbergasted to see how old and modern technology work together.

It was a very interesting experience which I'd like to repeat some other time.

Alexandru Crisu, 7<sup>th</sup> grade



Winter is the season when the bear "tells" us about the weather conditions. The climate evolution on earth consists of another series of unknown problems which are still being studied.

Is climate changing? This question is not from present but for centuries. Stephen Hepites himself, the one who set up the first Romanian Meteorological Service, analyzed in one of his major works from 1898 the way in which the uncommon atmosphere phenomena reflect themselves into the population attitude.

Situated into the South-East of Central Europe, Romania has a moderately temperate - continental climate. In Banat and some parts of Oltenia, one can feel the mediteranean breeze, with mild winters and rich rains especially in the autumn time. In South-East regions of the country we can find some hints of a pontic climate with hot summers and rare but heavy rains. In Maramures and North of Moldavia there is a humid climate with frosty winters and the west of the country is influenced by the oceanic climate with moderate temperatures.

#### The list of main prognosed parameters:

#### Temperatures

- minimum and maximum temperatures in the proximity of soil;
- air temperature in the proximity of soil

#### Humidity

- wind speed and direction;
- inferior, intermediary and superior clouds coverage degree
- Speed and direction of the wind
- Inferior, intermediary and superior clouds coverage degree
- Speed and direction of wind in the vicinity of soil prognosis.

Nobody can supply scientific prognosis for periods longer than 2 weeks, only suppositions/ estimations. According to the desired details three day prognosis has

an over 80% certainty degree, the five days prognosis less than 80% and finally the ten days prognosis is about 70% certainty.

What is prognosed for more than 2 weeks is just a kind of weather general characteristics estimation.

#### Which were the record temperatures registered in Romania?

44, 5 °C for summer and

- 38, 5 °C for winter.

In our country it has already been noticed a slight tendency of temperature raises, increased by the pollution effects in industrial areas such as Bucharest or Baia Mare. There is also a decrease in the precipitations level, especially in the mountains which could lead to fir trees drying. It seems that this is going to be a future tendency too.

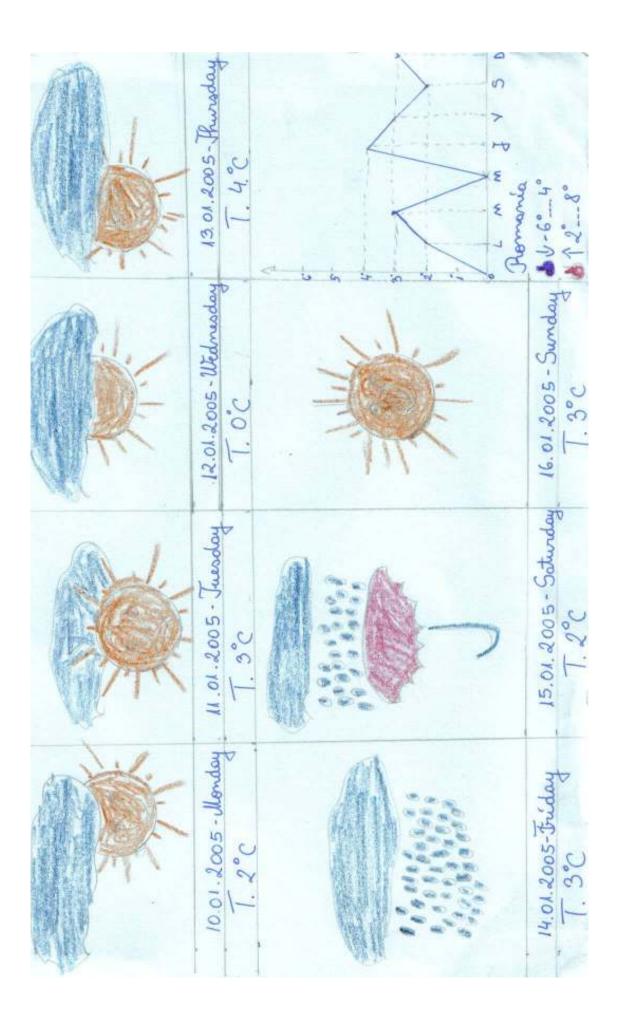
The agriculture and water supply consequences could be disastrous unless these areas aren't afforested and unless the hydrological reserves are better taken care.

**In July**, the hottest month the year, the average temperature in Romania Plain is of about  $23^{\circ}$ C; in the mountain area the temperature is of  $16^{\circ}$ C at the feet of Carpathians, and of  $6^{\circ}$  C at over 2000 meters altitude.

**In January** the average temperature oscillates between minus 3°C in Romania Plain and minus 1,5 and minus 2°C in Banat Plain.

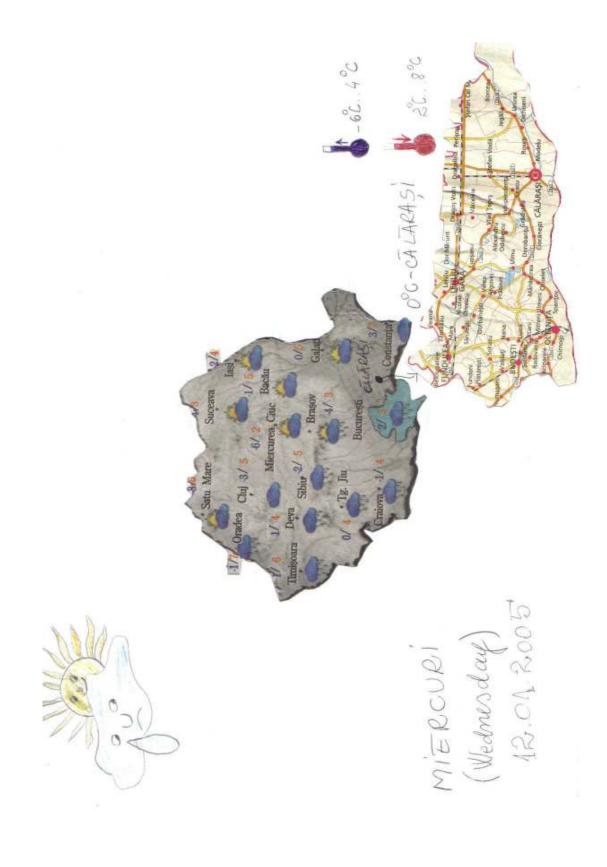
# **Weather in Calarasi**

10 -16 January 2005



**Climate "Oddities"** with a strong impact upon the life of the people from these places:

- Meteorological information from 1473 appreciated that it was the most arid year; the drought lasted from 20<sup>th</sup> of June till 20<sup>th</sup> of September. The Danube drained so much that it could be crossed on foot and in November people picked up second time ripened cherries.
- Grigore Ureche, a Romanian Chronicler wrote about a fire summer during Hospodar Peter's reign.
- From an anonymous chronicle we find out that in 1718 there were no crops in Moldavia and Tara Romaneasca, and the trees blossomed for the second time, but they didn't bear any fruit, and on Christmas days weather was as warm as in the summer time.
- The winter between years 1783-1784 is described by a manuscript notice.
  Then the snow reached the houses eaves and the people couldn't get out of their houses.



# **Uncle Bear Meteorologist**

"Bear Day" celebrated on the 2<sup>nd</sup> of February coincides with the date when people celebrated "Stretenia". Thus, in legends and our popular mythology, bear appears as one of the *oracle animals* for weather predictions and time orientation. It is said that on this very day from winter, the bear comes out of his den, and if it's warm and sunny and he can see his shadow, he starts collecting pieces of wood to repair his den, and gets beck to it because he knows that it's going to be cold again, and winter will continue to stay till late in the spring.

This inside out bear's attitude is very interesting, because, on the contrary, if he can't see his shadow as the sky is cloudy, he starts destroying his shelter and strolls through the forest.

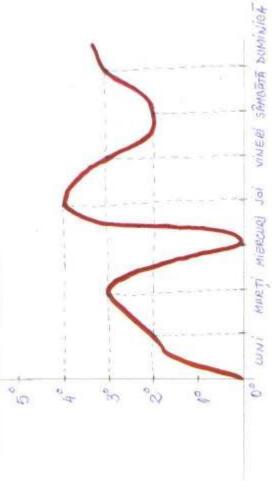
This contradictory bear's behaviour means in folk traditions changing weather for the months February and March.

On "Stretenia" day it is said winter and summer meets and starts fighting. Summer says that it's time for winter to leave but winter doesn't give up on her territory. Finally they reach to a sort of agreement: neither winter leaves nor summer comes, and thus, spring is born, and some of its days look like winter while others look like summer.

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## The folk calendar

The entire life of villagers is certainly influenced by field activities. Each season brings a new different feeling. Under these circumstances the folk calendar aims at establishing an agreement between weather and people's daily activities.

Thus, besides the classical year ( $1^{st}$  of January –  $31^{st}$  of December), there is another wine and tree growing year, that starts on the  $2^{nd}$  of February. On this very day people celebrate "Stretenia", a divinity that has an important part in weather predictions. She is a goddess with a changing nature. She is feared for her power of changing weather. It is also believed that on this day winter meets summer and from now on the day gets longer and longer.

If by the winter was harsh "Stretenia" will bring warm weather or if on the contrary the climate was mild, "Stretenia" will bring back cold weather.

## **Old sayings**

- if the forest gets dimmer, the weather gets warmer; if the forests hums, it is going to snow.
- if it is cold on 6<sup>th</sup> December the nest year will have rich crops.
- if it is sunny on 12<sup>th</sup> December it will be frost and clear sky on New Year's Eve, but if it's cloudy and white frost on the trees it will be warm and cloudy on New Year's Eve
- if in the evening of 25<sup>th</sup> of December the sky is full of stars, the next year will have rich fruit crops, and if the day of 25<sup>th</sup> of December is warm the spring will be cold.

## **Clouds**

- ♦ In most parts of the country people believe that the clouds are steams that emerge from soil, water or from the nostrils of a dragon that raises water from rivers and seas.
- ♦ The most common belief is that the clods are commanded by riding dragon's wizards.
- ♦ The cloud movements is explained as being the dragon's breathe, which is a clue for the wizards to choose their direction.
- ♦ The clouds that era closer to earth are called "dark clouds", "black clouds" or "rain clouds". It is also believed that they are the wizards' revenge and because they appear as a huge mass, sometimes they are called "fat clouds".
- ♦ The higher clouds are called "white clouds" and predict good weather, drought or snow. If they are thicker, it is a sign that hail is going to come, and if they are thinner it snows.

There are other beliefs in predicting weather according to the clouds condition:

- If the clouds are rosy, the weather is fine;
- If there are clouds on Christmas Day, the summer will be rich;
- If the clouds go down after rain, the sky is going to clear up, but if the clouds go up, the weather won't be fine;
- If the clouds ripple, it won't rain.

## Rain

In Romanian folk tradition, rain can be found in different ways. Thus, it is seen as the water god throws upon Earth, or as the water raised by the dragons from rivers and seas. The rain dragon is a snake that hasn't bitten anybody for 12 years and which has never seen a man before. This snake grows bigger and bigger until he becomes a huge dragon. When he comes out of the forest, the trees let him pass. He rises himself to clouds where he becomes the master of the thunder, lightning, rain and hail. When people hear claps of thunder from the sky, it is a sign that the dragons look for the devil to kill him. People believe that the rains that are good for Earth are sent by God and the destroying ones with hail and storms are sent by wizards.

#### There are a lot of signs that predict rain:

- There are clouds in the East, in the morning;
- The Sun and the Moon are surrounded by a shiny circle;
- The Moon rises among clouds;
- One can see the Milky Way;
- The rainbow appears in the morning;
- The Morning Star is dark;
- The wind blows from the south;
- The clouds move against the wind;
- If somebody drowns;
- When the hens don't go to sleep early in the evening.
- When the pig is not quiet or it takes straws in its mouth and moves them;

- In folk tradition the sunny rain appears when a maiden or a hug gets pregnant;
- The rains that last long appears when somebody kills himself, when a man is killed or a ghost dies.

In order to bring rain upon earth people used the old custom of 'Rainmakers'. This is a ritual of calling the rain through dances and songs, and it was practised during holidays. In the past the rainmakers were chosen from maidens, lads, gipsy women and children. Nowadays, this ritual is practised only by children, and there is a tendency of turning this old tradition into a simple game.

A rainmaker is chosen and covered with green leaves wearing a wreath. She is taken to the village fountain or to the villagers' houses where she is sprinkled with water, whey and milk. In some areas, she is put flour on the head for the rain to be thick.

Another magic and ancient ritual intended to stop drought or to bring fine weather is that of "Caloian". Young girls make up clay dolls representing Father and Mother Rain. These dolls are the symbol of drought or rain. They are buried according to the traditional funerals. After 3 days the dolls are disinterred, thus reviving the opposite symbol of that represented by the buried doll.

## **Lightning and Thunder**

In folk tradition lightning and thunder are considered revengeful deeds of some supernatural beings.

In some places people say that lightning appears when the dragons fight, but the most common beliefs are related to God and Saint Elijah. Thus the lightning is the candle God lights to look for devils or evil spirits.

In some other places, it is believed that Saint Elijah is the master of lightning and t6hunder and uses them to strike the devils or when he is mad because he lost his sheepskin coat.

### Wind

Wind appears either as friendly spirit or evil spirit.

Wind is considered a good - looking fellow, God's messenger, a dragon that breaths using only one nostril for not destroying the earth, or a huge man with 9 nostrils which he uses successively.

In some other areas wind is seen as a blind young man, cursed by his parents to hit himself by everything he meets in his way, as a strong man cursed by God to cool the earth with his breath, as an old man, as a child or as a snake.

People consider that there are either 4 winds (one for each season) or 12 winds (one for each month). It is also said that the dragons or the souls of the dead fly on the wind wings travelling to Heaven or to Hell.

## Hail

People consider that hail is rain, frozen by the dragons' breath, and it is in the power of the wizards, God, Saint Elijah, and Saint Peter. The predicting signs of hail are very hot days, when there is no noise in the air, or when the rams or the oxen fight. To banish hail, people toil the bells, burn incense in the middle of the earth, thrust an iron object in the soil or kindle the candles from Christ's Resurrection Night.

### **Snow**

Snow is said to come when:

- Dogs roll down;
- Crows gather in the fields;
- Cats crouch with their backs to the fire;
- It thunders in the winter;

### Sun

In folk tradition the Sun is seen as a handsome young man, whose face is so shiny, that it lightens the Earth. He walks in the sky every day; till midday he rides a buffalo, then in the afternoon he rides a horse and in the evening he rides a lion.

Other traditions show that Sun always rides a lion, and goes to sleep together with this lion. While asleep, they are carried to the east by some huge monsters. If the sun rested enough, then he rises shiny, but if the monsters didn't let him rest enough he raises dark or he stays in the clouds.

The change of the seasons is explained by peasants through the fact that the lion gets bored of staying all the time in a place, and he goes to other places, although they beg him to stay longer.

### Moon

At night the moon replaces the sun and she rests during daytime. She is a very beautiful girl, the sun's sister. The legend says that the sun wanted to marry his sister, but because it was a sin the marriage was forbidden and since then the Moon has been running from the sun, and they never meet.

Being the sun's sister, Moon was once as bright as her brother but God took away a bit of her brightness, hiding it in the sea water for no being noticed by the sun.

# Sky

In Romanian tradition the sky is lived by God, angels and saints and it is also called Heaven. The Canopy oh Heaven is placed over the water that surrounds the earth, has doors through which the angels bring news to people. Every night angels make religious services in the sky. The cocks hear the church bell and sing. The bell can be heard only by good and faithful people.

On New Year's Eve Night, on Epiphany Day and Resurrection Night, Heaven opens, but again only good people can see this thing and ask God to fulfil their wishes. At this very moment cattle talk and are heard by the same kind of people.

Publication edited by students from 7th grade.			
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Published by Barbu Ştirbei College, Călărași - Romania			
January, 2005			