

ASPECTS REGARDING THE SITUATION OF AGREEMENT AREAS FROM INSIDE AND OUTSIDE IAȘI CITY

ASPECTE PRIVIND SITUAȚIA ZONELOR DE AGREEMENT DIN INTRA- ȘI EXTRAVILANUL MUNICIPIULUI IAȘI

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Abstract. *Agreement, in the frame of Iași city, is assured by a number of parks and public gardens, quite frequented (Copou Garden, Exposition Park, Botanical Garden etc.) but the analysis of the zones with the special statute of "agreement zone" underlined the following aspects: Ciric area is relatively seldom used by the citizens of Iași, because of certain dysfunctional items; Breazu area is not used at the desired capacity because of the poor accessibility and reduced agreement options; Țicău area is not equipped and arranged in order to serve an agreement purpose; Cetățuia area is appreciated more for the surroundings and the specific micro-climate than for the existing opportunities; Galata area offers few recreational activities because it is not equipped and arranged and the Bucium-Repedea area is not sufficiently equipped to cope with a great number of visitors. The study underlined the fact that in the surroundings of Iași, in present, practically exists a deficiency of 3200 ha, because the surface of the in-city agreement zone is of only 38,30 ha, and the one of out-city agreement zone is of 367 ha.*

Rezumat. *Agrementul în cadrul municipiului Iași este asigurat de către o serie de parcuri și grădini publice foarte frecventate (Grădina Copou, Parcul Expoziției, Grădina Botanică, ș.a.) dar analiza zonelor cu statut special de zone de agreement a evidențiat următoarele aspecte: zona Ciric este relativ slab utilizată de către ieșeni, datorită unor certe disfuncționalități; zona Breazu nu este utilizată la capacitatea dorită datorită accesibilității reduse și dotării precare; zona Țicău nu este dotată și amenajată corespunzător funcției recreative; zona Cetățuia este prețuită mai mult pentru cadrul peisagistic și microclimatul specific, decât pentru dotările existente; zona Galata oferă foarte puțin din punct de vedere recreativ, fiind nedotată și neamenajată iar zona Bucium-Repedea nu are dotarea suficientă pentru a face față fluxului mare de vizitatori. Studiul a evidențiat faptul că în zona municipiului Iași, la ora actuală există practic un deficit de aproximativ 3200 ha, deoarece suprafața zonelor de agreement intravilane este de doar 38,30 ha, iar cea a suprafețelor de agreement extravilane de 367 ha.*

Daily agreement and especially the one practiced in week-ends and on holidays is assured, in the frame of Iași city by a number of green zones, which entered in tradition from this point of view, like as Copou Garden, Exposition Park, Ghica Vodă Strip, Botanical Garden etc. Inside the Iași city, agreement is also assured by the town's swimming pool, by Nicolina watering zone as well as by the plantations on Galata slope.

MATERIAL AND METHOD

The analysis of the territory around Iași was realized between May 2005 - October 2006, on a radius of approximately 15 km around Iași, through visual monitoring activity of the actual statute of the agreement zones in Iași and in the surroundings; more complex observations were made together with the specialists from Forestry Department of Iași, being part of a larger study.

The acquired and processed data served for structuring the results regarding vegetation and its settlement in different zones inside of the close perimeter of Iași in order to draw some conclusions about the agreement zones and their present status, because they are parts of nature quite altered by the human activity in the studied area.

RESULTS AND DISCUSSIONS

In the administrative territory of Iași, the following agreement zones provide the agreement function:

1. CIRIC ZONE - situated at 6 km northeast from the center of the city, on Ciric river's valley. The main attraction elements are Ciric forest with a 252, 2 ha surface and the Ciric group of lakes (I, II and III), with a total surface of 31,5 ha, at which there are added a number of facilities and specific arrangements: the beach, the landing place, the children's playgrounds and sport fields, the camping area, the public food facilities etc. Ciric forest, considered actually a park-forest, represents a plantation of native and exotic trees and bushes, planted between 1936-1963, in order to stabilize the slipping slopes and also to transform the area into an agreement base. Under floristic aspect (by C. Dobrescu and co., 1958 and E. Agachi, 1977) the right slope, planted in the early stages, has as main tree species the followings: American maple (*Acer negundo*) approximately 55%, oak (*Quercus robur*) – 15%, locust tree (*Robinia pseudacacia*) – 10%, ash tree (*Fraxinus excelsior*) – 6% and, in a reduced ratio, black American nut tree (*Juglans nigra*), Pennsylvania ash tree (*Fraxinus pennsylvanica*), large leaf linden tree (*Tilia platyphyllos*), elm tree (*Ulmus foliacea*, *U. procera*, *U. pumila*), Norway maple (*Acer platanoides*), Tartarian maple (*Acer tataricum*), wild chestnut (*Aesculus hippocastanum*), tree of heaven (*Ailanthus altissima*), sessile oak (*Quercus petraea*), mahaleb cherry (*Prunus mahaleb*), eleagnus (*Elaeagnus angustifolia*), honey tree (*Gleditsia triacanthos*), japanese locust tree (*Sophora japonica*), catalpa (*Catalpa bignonioides*) ș.a.

There was noticed that only the oak and the ash tree vegetate satisfyingly, while the maple and the locust tree suffer in case they are placed on eroded or salty soil. Bushes have a random representation through the following species: *Euonymus europea*, *Sambucus nigra*, *Corylus avellana*, *Crataegus monogyna*, *Prunus spinosa*, *Rosa canina*, *Viburnum lantana*, *Amorpha fruticosa*, *Colutea arborescens*, *Rhus typhina* etc.

In what regards the recreational function, the Ciric agreement base is not used at normal capacity by the citizens of Iași because of the following dysfunctional items:

- Poor public transportation for the visitors towards this area;
- Insufficient and uninteresting endowing of the agreement base with the required public facilities;
- Periodic pollution of the Ciric lakes' waters, fact that was the object of repeated debates in the local press.

2. BREAZU ZONE – is placed at north from Iași, at approximately 1 km in-city limit, the main attraction being Breazu forest. From all 49 ha of this forest, almost 33 ha assure the agreement, specifically the area placed at east from the county road. The tree species encountered in the Breazu forest are: sessile oak (*Quercus petraea*), oak tree (*Quercus robur*), hornbeam (*Carpinus betulus*), common maple (*Acer campestre*), maple (*Acer platanoides*), Tartarian maple (*Acer tataricum*), linden tree (*Tilia tomentosa*, *T. cordata*), ash tree (*Fraxinus excelsior*), elm tree (*Ulmus foliacea*), service tree (*Sorbus torminalis*), bird-cherry (*Cerasus avium*), wild apple tree (*Malus sylvestris*) etc. The underwood is represented by the following species: common smoke tree (*Cotinus coggygria*), standard tree (*Staphylea pinnata*), mangy wood (*Euonymus verrucosa*), european mangy wood (*Euonymus europea*), wayfaring tree (*Viburnum lantana*), dogwood (*Cornus mas*), red dogwood (*Cornus sanguinea*), privet (*Ligustrum vulgare*), hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), wild rose (*Rosa canina*) etc.

It's a transition forest between the forest steppe and the quercinee's belt, presently in a very advanced degradation ruderal becoming process, especially on the margins and the access ways. In what regards the recreational function, Breazu forest is not used at full capacity, because of the poor accessibility and relatively precarious endowment. The area offers the possibility of active and passive recreation in a microclimate that is specific for a plain forest, with a relaxing landscape, favored by the proximity of the vineyards nearby. During winter, a part of the area is suitable for sleigh tracks and even for ski.

3. ȚICĂU ZONE is situated in the northeastern part of the city, close to the in-city limit, on the afforested slope of Copou hill. The main attraction is Țicău forest, with a total surface of 230 ha, from which approximately 50 ha are used for agreement, up from Țicău district to Târgușor Copou zone. Țicău forest is a plantation established between 1966 și 1978 cu with tree mixtures made from: oak (*Quercus robur*), Norway maple (*Acer platanoides*), American maple (*Acer negundo*), sycamore (*Acer pseudoplatanus*), common maple (*Acer campestre*), ash tree (*Fraxinus excelsior*), elm tree (*Ulmus foliacea*), locust tree (*Robinia pseudacacia*), bird cherry (*Cerasus avium*), wild service tree (*Sorbus torminalis*), forest pine (*Pinus silvestris*), larch (*Larix decidua*), nut tree (*Juglans regia*), poplar (*Populus alba*, *P. euramericana*), Mahaleb cherry (*Prunus mahaleb*), wild

pear tree (*Malus sylvestris*), red dogwood (*Cornus sanguinea*), privet (*Ligustrum vulgare*), hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), elder tree (*Sambucus nigra*), Russian olive (*Elaeagnus angustifolia*) etc. Țicău forest is not endowed and arranged to offer a recreational function, being suitable only for walks. It also has springs, captured and directed to the base of the slope. In winter, a semi-arranged ski and sleigh track is available.

4. **CETĂȚUIA ZONE** is situated in the southern part of the city, close to the in-city limit, on the northern slope of the Cetățuia hill. The main attraction elements are represented by Cetățuia forest, Cetățuia monastery with the belle view nearby and to north, Frumoasa monastery.

Cetățuia forest, with a total surface of approximately 120 ha is partially used for agreement purpose (app. 20 ha), respectively the northeastern sector of the hill. In fact it is a plantation established between 1947 and 1978, for stabilizing the land slipping that was affecting this slope. The forest contains mostly mixed tree associations – oak, common maple, maple, Tartarian maple, sycamore, ash tree, elm tree, bird cherry tree, flowering ash tree, locust tree, honey tree, dogwood, red dogwood, hawthorn, wild rose, blackthorn, Russian olive etc. – or single specie tree associations (locust tree, poplar, pine, oak). As recreation function, Cetățuia forest offers only the landscape and the specific climate conditions, few unfit paths towards the top of the hill for the belle view point and the monastery, as well as a rather picturesque winding road.

5. **GALATA ZONE** is situated in the southwestern part of the city, on the slope of Galata-Miroslava hill, in-city as well as to the in-city limit. The main attraction element is the vegetation and the Galata monastery from nearby. Many parts make the forest and it is covering a total surface of 103 ha, from which a very small area, of only 4 ha, is used for agreement purpose (especially the in-city parts of the forest). The forest was a plantation established between 1952 and 1978 for stabilizing the slope, and it is made by pure tree associations of locust tree (25 ha) or by locust tree and pine (app. 30 ha), or by mixed tree associations (oak, linden tree, ash tree, sycamore, common maple, maple etc.) on app. 32 ha, the rest being small areas occupied by pine (4,4 ha), Euro-American poplar (3 ha) and willow (1,6 ha). From the recreational function's point of view Galata forest offers few things, being unfit and not endowed to serve this purpose.

6. **BUCIUM-REPEDEA ZONE** is situated in the southeastern part of Iași, at app. 10 km, on the slopes and the plateau of Repedea hill, which dominated the surroundings of Iași from 350-400 m altitude. The attraction elements are represented by the forest, the motel and the Bucium camping area, Tărăța hermitage, Repedea plateau with the belle view points towards the city, Repedea geologic-paleontologic reservation s.o.

The forest is part of the forestry slope Bucium – Pietrărie – Bârnova – Mogoșești – Poieni - Păun – Repedea, which covers a surface of app. 15.000 ha.

In the in-city area, the forest and the agreement zone occupy approximately 40 ha, containing sessile oak (*Quercus petraea*) and oak (*Quercus robur*); other species frequently appear : hornbeam (*Carpinus betulus*), linden tree (*Tilia tomentosa*, *T. cordata*), ash tree (*Fraxinus excelsior*), Norway maple (*Acer platanoides*), common maple (*Acer campestre*), s.o. and from the bushes: hawthorn (*Crataegus monogyna*), standard tree (*Staphylea pinnata*), wayfaring tree (*Viburnum lantana*), hazelnut tree (*Corylus avelana*), dogwood (*Cornus mas*) s.o.

Although it is not well endowed and not fit for recreational purpose, being at the same time hardly accessible, Bucium forest is intensively frequented, especially in summer but also in winter, when opportunities for ski and sleigh rides occur.

The legal standards underline the fact that the city of Iași would require a surface of 3600 ha agreement zone, presently existing only 405 ha agreement zone, creating a deficit of 3200 ha. Because of the afforested surface of only 1044 ha from inside the boundaries of Iași, from which only 960 ha are considered as forests with recreational function, it was observed that covering the agreement areas' deficit is not possible. The solution could be the surroundings of urban area, by considering and arranging the forests to serve as recreational agreement zones, covering a surface of 6100 ha.

CONCLUSIONS

1. The analysis of the surroundings of Iași was made between May 2005 - October 2006, on a radius of app. 15 km around Iași, by visual monitoring of the present status of the agreement areas from in-city and the surroundings of Iași.
2. Inside the administrative boundaries of Iași, the agreement function is assured by the following areas: Ciric, Breazu, Țicău, Cetățuia, Galata and Bucium-Repedea.
3. Under the aspect of recreational function, Ciric forest, as agreement base, is not used at normal capacity by the citizens of Iași because of some dysfunctional items (poor service, insufficient endowing and lake's water pollution).
4. Breazu forest is not used at full capacity as recreational area, because of poor accessibility and precarious endowing.
5. As recreational function, Țicău forest is not endowed and arranged for this purpose; it is suitable only for walks. It also has springs, captured and directed to the base of the slope..
6. From the recreational point of view, Cetățuia forest offers only the landscape and the specific climate conditions, few unfit paths towards the top of the hill for the belle view point and the monastery, as well as a rather picturesque winding road.
7. From the recreational point of view, Galata forest offers few, being not sufficiently endowed and arranged for this purpose.

8. Although it is not well endowed and not fit for recreational purpose, being at the same time hardly accessible, Bucium forest is intensively frequented, especially in summer but also in winter, when opportunities for ski and sleigh rides occur.

9. Iași city would require a surface of 3600 ha agreement forests, presently existing only 38,30 ha of in-city agreement zones and 367 ha of out-city agreement zones.

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