

## Urban agriculture: a growing field for professionals

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Backyard chickens, rooftop greenhouses, community gardens, and beehives at school: over the past few years, the public and the media have marveled at examples of urban agriculture. Is this just a fleeting fad or a more permanent trend?

In fact, agriculture in and around cities is nothing new. Since the dawn of civilization, a few thousand years ago, city dwellers have grown plants and raised livestock in and around town in order to feed themselves. In the past few years, public interest in urban agriculture has grown to such a scale that even private businesses are taking note.

### **Cities against agriculture: an eternal conflict?**

While farming feeds cities, cities often turn their backs on farming. Consider urban sprawl, which often occurs at the expense of prime agricultural land surrounding urban centres. To give some local examples, Côte-des-Neiges, Pointe-Claire and Pierrefonds were all significant farming areas well into the mid-20th century. But they are now residential neighbourhoods.

Furthermore, some laws and municipal policies restrict or exclude farming activities in the city: a ban on raising pigs or cattle for reasons of public health, a restriction on the use of pesticides and so on.

The proximity of the city is sometimes an advantage for agriculture, such as making direct marketing easier; for example, think of the market gardens in the City of Laval.

However, competition for resources like land, water and labour has often created conflict between urban development and agricultural activity. In order to resolve some of these conflicts, several Canadian cities – including Montreal and Toronto – have developed food security policies that propose, among other things, to both stimulate and regulate urban agriculture.

### **Agrologists, take up your spades!**

Despite the challenges mentioned above, many urbanites see urban agriculture as the solution to several contemporary problems. There is of course the big question of food security. According to the United Nations (UN), we will need to feed 9.7 billion people in 2050. Since the Earth isn't getting any bigger, should we return to cultivating vacant lots in cities? Or should we install high-tech agriculture "factories" on roofs of buildings or in warehouses?

Other stakeholders underline the psychological, social and educational potential of urban agriculture: it helps integrate residents into their neighbourhood, improves physical and

mental health through gardening, encourages the consumption of fresh fruits and vegetables and strengthens connections between food production and consumption, the ultimate in “eat local”.

There are also environmental benefits. The presence of plants in densely-built downtown neighbourhoods can decrease the effect of “heat islands” and absorb some of the CO<sub>2</sub> produced by human activity, which is more intense in urban areas.

Despite these key concerns, few professional agrologists seem to focus their efforts on the challenges of urban agriculture. Maybe it is because our training directs our attention towards the countryside rather than the city. Or maybe it is because most urban agriculture projects are small-scale or non-commercial: community gardens, school gardens and so on.

However, the agrologist’s expertise could have great benefits for urban agriculture. By necessity, urban agriculture must be intensive and produce high yields in a limited space. Is this not already the case with the poultry industry?

In the city, soils are highly modified and sometimes contaminated. So we grow vegetables and herbs in containers filled with soilless substrates...just as they do in greenhouses. The use of pesticides in densely populated areas carries known risks, as recognized in the importance of agrologists’ work with golf courses.

The examples are many and varied: agrologists have the scientific knowledge and the practical know-how needed for rational and sustainable agricultural development in urban areas.

Even if many “city farm” projects are not-for-profit, municipal officials, non-governmental organizations and other agencies running these projects need to manage large budgets and teams of workers or volunteers. City-dwellers’ enthusiasm for urban agriculture, though laudable, sometimes exceeds their expertise. So it only makes sense to consult professionals to make sure that everything is done right.

For example, several state extension services in the USA have created positions for extension agents who specialize in urban agriculture. These experts are needed to respond to the growing demand for accurate, impartial information on the subject.

### **Urban agriculture – multifunctional...and multi-professional**

Obviously, no agrologist is an island. Urban planners, architects, landscape architects, engineers, social workers, dieticians, geographers and many other professionals all have an important part to play in the development of urban agriculture. In fact, the challenges of urban agriculture are not only agronomic and economic but also social, environmental, educational and even aesthetic. With such a diversity of objectives, it is not surprising that such a range of experts is called upon. And this is a good thing.

The whole being greater than the sum of its parts, the urban agriculture movement provides a great opportunity for interdisciplinary and inter-professional collaboration. Although collaboration between individuals from a range of different professions may include many challenges, it can also lead to projects that are better developed, better planned and...more professional!

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