

Botanic gardens as partners in One Health

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Botanic gardens globally are embracing the opportunity (and civic obligation) to be leaders in One Health, supporting the inextricable link between human, animal, and environmental health, including through biodiversity conservation. Such work includes in situ and ex situ plant conservation; interpreting plants and landscapes by providing information to the public about their extraordinary cultural importance and significance, bolstering resilience to the environmental pressures of globalisation; and encourage the public to increase their physical, emotional, psychological, and spiritual well-being by spending time in various forms of nature, helping them appreciate, benefit from, and uphold the importance of ‘biocultural’ ecosystem services. NatureRx is an example of one such program in which medical practitioners can provide “green prescriptions” to patients, rather than prescribing medications, with the intent of improving patients’ well-being via free and accessible ecosystem services. Significant outcomes are noted across populations and demographics from spending even minutes in nature—even a small city park—including increased resilience, happiness, healing, concentration, and attention; and decreased stress, anxiety, depression, fatigue, and blood pressure. Botanic gardens and their staff are key partners in this approach, and extend the impacts—increasing positive environmental attitudes and environmental stewardship behaviours—via guided interactions with the environments. Another example is botanic gardens partnering with wildlife ecologists to enhance natural and cultivated landscapes, and to ensure sustainable management, making spaces more conducive to healthy populations of animals and birds, and thereby reducing the likelihood of zoonotic disease spillover. These are key elements of the One Health matrix: improved environmental, wildlife, and public health. As botanic gardens focus more on environmental and human health, they should be welcomed as important partners in One Health initiatives. Examples will focus on the work at Cornell Botanic Gardens and the College of Veterinary Medicine, both of Cornell University (USA).