

***World wide weed: Global trends in cannabis cultivation and its control.* By Tom Decorte, Gary R. Potter & Martin Bouchard, Editors.** 2011. Surrey, UK: Ashgate. 293 pp. Hardcover \$104.95 list; also available as an e-book for about \$85.00. ISBN: 978-1-4094-1780-4

By Lora J. Bristow

This book features 16 chapters, each of which is a peer-reviewed empirical study on marijuana cultivation and/or state attempts to control cultivation. It is interdisciplinary, with researchers utilizing methods and theoretical frameworks from economics, criminology, sociology, social work, and even one study combining botany, forestry, ecology, and geography. The studies themselves feature both quantitative and qualitative methods, including aggregation and analysis of existing governmental data, innovative statistical analysis, case studies, ethnography, interviews, participant observation, and surveys. They are not directly comparative; rather, each looks at a particular topic in a specific location and context. Studies range from use of a micro perspective, for example motivations, methods, and career paths of individual growers in a specific area, to a macro perspective, such as national trends. They include consideration of the interplay between cultivation and governmental responses to it in the form of legal policy and enforcement. As to be expected given the title, it is also international, with authors from Canada, Spain, Denmark, Belgium, Finland, the UK, the Netherlands, Australia, the US, New Zealand, and research conducted in these countries as well as Morocco and the Caribbean. Chapter authors include well-established experts in the field and emerging researchers working in academia and governmental organizations like the United Nations. They are both male and female, and many chapters are produced by collaborative teams.

Indeed, the book itself came about after networking and collaboration at annual conferences of the European Society for Social Drug Research and the International Society for the Study of Drug Policy, which resulted in the formation of the Global Cannabis Cultivation and Research Consortium (GGCRC), whose members were invited to submit work. The GGCRC hosts a website (<http://worldwideweeds.nl>) that features information on current research as well as links to an online survey, the International Cannabis Cultivation Questionnaire (ICCQ), which the Consortium is conducting to gather information from small-scale marijuana growers throughout the world. There is even a link to a YouTube video explaining the survey, which notes the aim of countering stereotypes of growers and exploring the realities. Of note, the GGCRC invites any interested researchers who might like to use data from this survey to contact them for access. The website also provides a list of articles and books authored by Consortium members on cannabis cultivation and policy, as well as links to members' personal websites.

The book is tied together by themes and questions raised in the Preface, written by Peter Reuter, and an introductory chapter by the editors, with some beginning answers and further suggestions for research provided in a closing chapter, also by the editors. They theorize the current globalized spread of marijuana cultivation as due to widespread and growing demand for marijuana, indoor and outdoor opportunities for cultivation in any location, willing cultivators, and failed state and international policies to control cultivation.

Marijuana differs from other plant-based drugs (cocaine, opiates) and its cultivation differs from other crimes. Although variation is seen in regions and nations, patterns are clear. Marijuana is the most used drug in the world; about half of all persons born after 1960 in the US and after 1980 in the UK report some use (p. xv), while the UN estimates about 3-4% of adults worldwide are current users (p. 4). Production has shifted to industrialized nations; in fact, Bouchard (2007) found that up to 1% of the population of Quebec is estimated to be involved in cultivation. Small scale growers take pride in their craft and often express ideological beliefs about not only their right to grow, but the righteousness and aesthetics of their product. A strong culture surrounds marijuana cultivation, as evidenced in cannabis competitions, festivals, magazines, books, websites, and clubs. The shift to increased domestic cultivation has been accompanied by shifts in state policies, with quasi-legal markets arising in some places and the possibility of legal markets becoming more distinct (note the legalization of recreational use in November 2012 elections in Washington and Colorado).

The book opens with chapters on the English-speaking Caribbean (Axel Klein) and Morocco (Kenza Afsahi) as examples of traditional producing countries, which examine some of the economic, social, and ecological impacts of marijuana cultivation and how these have been shaped by global drug policies. These chapters demonstrate the correlation of increased cultivation in areas where the local economy has collapsed and a pattern of underdevelopment is seen in terms of supports for local residents.

The next section of the book features studies of local small scale cultivation in Europe and North America. In Chapter 4 (Helle Vibeke Dahl and Vibeke Asmussen Frank), a study of Danish marijuana users who report their use as medical parallels the public arguments made for medical marijuana in the US as well as the doubts about its legitimacy. In Chapter 5 (Pekka Hakkarainen and Jussi Perälä), a study of recent increases in cultivation in Finland utilizes a conception of six “shared worlds for moral justifications” (p. 78) to come to agreement as a framework for the arguments the growers put forth about their activity. Chapter 6 (Tom Decorte) considers the myths and realities of indoor cultivation, THC content, contamination by chemicals, and other quality factors and their corresponding impact on health and psychological effects of use and small scale cultivation in Belgium. Cultivators report desire for marijuana that is less potent and more pure as a major factor in their decision to grow their own rather than rely on what they can purchase in Dutch coffee shops. Chapter 7 (Martin Bouchard and Holly Nguyen) classify cultivators in Montreal/Quebec and Vancouver as Professional, Pro-Am, Amateur, and Average Career, based on combinations of skill level and commitment, and include detailed case studies of two cultivators, one a Vietnamese woman. Chapter 8 (Aili Malm, Rebecca Nash and Samuel Vickovic) use police data on cultivators in British Columbia to map and analyze co-offending networks in terms of shape, frequency, composition, and structure. Chapter 9 (Ralph Weisheit) summarizes cannabis cultivation and eradication efforts, particularly in California, from the 1980s to present as well as legislation on medical marijuana from 1996 to 2010 across the US, and predicts that senior citizens may become an important voting bloc in support of further medical marijuana access as they experience conditions for which marijuana has been shown to be effective. Chapter 10 (Xabier Arana and Virginia Montañés Sánchez) discusses the emergence of non-profit collective production Cannabis Social Clubs in Spain’s uncertain legal environment, where personal, private cultivation and consumption is not punishable, but public consumption and possession can be.

The book's third section considers efforts to control cultivation in the industrial world. Chapter 11 (Dirk J. Korf) details "back door" supply of cannabis to coffeeshops in the Netherlands, particularly the increase in high potency domestically produced cannabis, the public perception that this is dominated by criminal organizations, the ways in which drug policy actually supports the growth of these organizations, and the resulting strengthening of law enforcement efforts against cultivation. He also looks at the interaction between normalization, a social process, and drug policy. Chapter 12 (Simon Lenton) looks at Western Australia's efforts to plan and implement a prohibition with civil penalties policy for cultivation of not more than two non-hydroponic plants, rather than a criminal penalty. Chapter 13 (Margaret Kalacska, Pablo Arroyo-Mora, Eva Snirer and Rick Parent) reviews cannabis's botanical and chemical characteristics and growing conditions and how these make various forms of detection and biological control or eradication—by fungi, insects, other plants, animals, or soil contamination by heavy metal—challenging. Chapter 14 (Chris Wilkins and Paul Sweetsur) endeavors to use data from New Zealand's aerial cannabis eradication campaign and National Household Drug Survey and longitudinal surveys to calculate likely domestic cannabis production and consumption as well as seizure rates and the factors which inhibit the eradication campaign's effectiveness. Chapter 15 (Gary R. Potter) examines international drug policies and law through the UN and other bodies, the failure of eradication efforts, and their impact on cultivation, including possibly encouraging the spread of cultivation to new areas of the world, and focuses on indoor cannabis cultivation in the UK. He concludes that eradication is difficult not because of socio-economic or geographic factors, but due to characteristics of cultivation itself and the adaptive actions of growers.

This book will be informative for policy makers, particularly those who aim for a harm-reduction model. It adds to our understanding of the complexity, long-term nature, and uniqueness of issues around marijuana cultivation and how this differs from other crimes. It is also useful in the university classroom, as an example of solid interdisciplinary research, using varied methods and representing multiple contexts, on a fairly hard-to-study topic. The studies raise many questions for further research. For example, I found myself wanting to learn more about connections between popular perceptions of marijuana in a specific area and levels of cultivation; multiple meanings and ideologies of marijuana, including marijuana as resistance to colonialism and capitalism; and marijuana cultivation as a response to economic change in an area. These studies, taken together, encourage us to question the current blanket labeling of marijuana cultivation and use as a crime, and expand our research and thinking about marijuana studies beyond the field of criminology.