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# On the Evolutionary Stability of the Uruguayan Savanna<sup>§</sup>

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## Abstract

Tropical and subtropical grasslands have been the single-most valuable resource throughout the course of human evolution, and, to this point, despite fundamental errors associated with economic theory which suggest otherwise, these rangelands remain amongst the most evolutionarily stable (and thus valuable) assets on Earth. However, given the problem noted above and, in conjunction with the inherently short-term nature of political motivations, these grasslands are being rapidly lost to crop-lands and urban sprawl – and thus it is of little surprise that conservation efforts are most prominent amongst private individuals with long-term goals and dominant Resource Holding Power (\$). This brief communique submits that, not only would political leaders serve their nations well by extending long-term economic incentives to those who conserve grasslands, but that, moreover, economic prosperity, food security, and national security may prove ephemeral without such measures.

## Introduction

Although few argued that Markowitz's portfolio theory was fundamentally flawed prior to the recent financial crisis, the fact that his two most faithful and influential disciples blew up "Long Term Capital Management" by losing \$4.6MMM USD *less than four years* after their 1994 launch should have sufficed to suggest that, perhaps, modern portfolio theory was seriously flawed (*cf.* Lowenstein 2000 ; Taleb 2001 ; Clarkson 1997) insofar as long-term strategy is concerned. Indeed, despite prevailing conjecture to the contrary, appetite for risk should *decrease – not increase –* as investment horizons expand; Funk (2010a ; 2010b ; 2010c) finds truly long-term capital management is founded upon a trinity of evolutionarily stable asset classes: grasslands, gold and "guns" (*i.e.*, reserve currencies backed by military power: *e.g.*, USD, RMB). Although we merely have a moment to explore grasslands, we must save guns, gold, and methodological considerations for other discourses (*cf.* Funk 2010a ; 2010b ; 2010c).

## Discussion

The author was recently commissioned to devise an investment strategy for The Ottawa Fish & Game Club (OFGC), a land-acquisition consortium with a truly long-term investment horizon (100 yrs). The mandate was to emulate and, if possible, exceed the inviable strategy employed by the Huron Mountain Club (HMC). Like HMC, OFGC held wildlife production lands on Michigan's upper-peninsula (U.S.) and sought to increase their holdings – the only questions that remained were (i) where and (ii) by how much? Despite the fact that HMC's long-term strategy (*cf.* Flaspohler & Meine 2006) has proven remarkably resilient and extraordinarily successful since its deployment in 1889, both evolutionary and economic theory suggests that the dominant strategy for OFGC is not to emulate HMC by increasing forest holdings in Michigan's upper-peninsula, but, rather, through strategic diversification, by acquiring (*and preserving*) grasslands of the Uruguayan Savanna (WWF 2010). Why? In brief, we'll summarize this long yarn by noting that (a) man is a tropical species and (b) that grasslands have served as the single-most long-standing, evolutionarily stable "asset" throughout the long history of *Homo* evolution (*cf.* Grice & Hodgkinson 2002).

In closing we will merely note that some argue that the optimal long-term exploitation of grasslands represents an evolution progression from grass-land to crop-land to commercial and residential development. Indeed, for the past 50 years, CRESUD (2010) has deployed this strategy with relative success. Others, however, conjecture that exploitation through long-term preservation represents winning strategy (*cf.* Bilenca & Miñarro ; Turner 2008 ; Sanchez 2006). If one traces the logical implications that follow from Funk (2010a ; 2010b ; 2010c), perhaps it may be clear why we side with the latter. CRESUD's error is, in essence, based upon a problem invariably associated with teleological thinking: namely that human populations will always *increase*. Alas, however, CRESUD'S central assumption is false. "This sketch is most imperfect; but in so short a space I cannot make it better" (Darwin 1858, p 50); thus an a more expansive discourse is underway (Funk, Forthcoming).

## References

- Bilenca D, Miñarro, F (2004) *Conservation strategy for the natural grasslands of Argentina, Uruguay and southern Brazil* (FVSA, Buenos Aires).  
Clarkson R (1997) *Financial Risk and the Markowitz and Black-Scholes Worlds* (AFIR, Queensland).  
CRESUD (2010) *2010 Annual Report* (CRESUD, Buenos Aires).  
Darwin C (1858) The Darwin-Wallace Paper. *Proc Linn Soc* 3:45-62.  
Flaspohler D, Meine C (2006) Planning for Wildness. *J of Forest* 1:32-42.  
Funk M (Forthcoming) *On the Problem of Long Term Capital Management: Grasslands, Guns, & Gold* (Univ of Malta, Msida).  
Funk M (2010a) *The Principles of Economics & Evolution III: In Search of Evolutionarily Stable Investment Strategies* (Lifeboat Foundation, Minden). <<http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution3.pdf>>  
Funk M (2010b) *The Principles of Economics & Evolution II: In Search of Evolutionarily Stable Banking Strategy* (Lifeboat Foundation, Minden). <<http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution2.pdf>>  
Funk M (2010c) *The Principles of Economics & Evolution I: A Survival Guide for the Inhabitants of Small Islands, Including the Inhabitants of the Small Island of Earth* (Lifeboat Foundation, Minden). <<http://lifeboat.com/papers/matt.funk.on.the.principles.of.economics.and.evolution.pdf>>  
Grice A, Hodgkinson K (2002) *Global Rangelands* (CABI, Oxon).  
Lowenstein R (2000) *When Genius Failed* (Random House, New York).  
Sanchez G (2006) *La Patagonia Vendida* (Marea, Buenos Aires).  
Taleb N (2001) *Foiled by Randomness* (Texere, New York).  
Turner T (2008) *Call Me Ted* (Grand Central, New York).  
WWF (2010) *Uruguayan savanna – NT0710* (WWF, Washington, DC).

§ The Uruguayan savanna extends from the southern tip of Rio Grande do Sul, Brazil, through all of Uruguay, and into Entre Ríos, Argentina.