

## Commentary

### "I Don't See A Chat, Let's Bulldoze" A Commentary on Ecological Consulting

by

Graham J. Forbes

#### A Typical Example:

It's mid-June and you're relaxing after a morning of leisurely birding. The phone rings. The local consulting firm needs a biological survey of the old woodlot near the highway and you're one of the few naturalists available. The woodlot, recently purchased by a developer who has applied to re-zone the land to residential use, is the same woodlot where you saw a Red-shouldered Hawk (a provincially designated rare species) in June, last year. You have the time, the money is good, and so you take the job. But, besides finding a small grove of American chestnuts (a threatened species), you don't find anything else of "significance"; not the Red-shouldered Hawk, nor any sign of nesting. A year later, most of the trees are gone and the woodlot is now home to 30 luxury residences, and a handfull of stately maples. However, there is some comfort because the chestnuts survived, saved by the developer on the advice of the consultants. Nevertheless, driving by the new woodlot, you can't help wondering if you did the right thing...if you could have looked harder for that hawk.

The above account describes, in a rather simplified overview, both the pros and cons of environmental consulting, and the ideological

dilemma facing naturalists. Ecological or environmental consulting is one of the fastest growing industries in Canada and the readers of this journal represent an expertise in ornithology and natural history that is also increasing in demand. But the process has many flaws and for the birder who has spent a lifetime in local woodlots, the issue is complex. How do you, as a naturalist, best maintain natural areas in regions of expanding human populations and demand? Do you join a consulting firm and limit the damage of (inevitable) development, or join the "antis" and fight for a clearer, unadulterated vision of preservation?

The following briefly outlines a typical process of sub-contracting. Variations in methods and mitigation exist involving such tools as geographic information systems and experimental manipulation but they are not presented here due to their infrequent use. In most cases, the consulting firm is hired by a developer who requires a study of the effects of that development on the physical properties (flora and fauna). The consulting company will outline the scope and nature of the development in blueprints, maps, and air photos varying in scale, detail and accuracy. If the area is large, a complete inventory may not be

possible because of time and money constraints. Instead, some system of sampling will be required, and often, it is your job to determine the degree of sampling as well as the timing of the field work.

In the field, often at dawn or dusk (to maximize the survey during periods of high animal activity), the inventory is conducted by an assortment of birding, recorded tape play-backs, small mammal live trapping, turning over rocks and rotting logs, and sloshing through ponds. Ah...this is the life, actually being paid to do your hobby!

The data is often divided into distinguishable physiographic areas such as woodlot #2, swamp #1, meadow #3b, in accordance with the reports of other project members. The final report details your methodology (hours in the field, location of transect lines, etc.), results (often limited to presence-absence observations), and recommendations. The recommendations usually consist of proposed mitigative measures that could limit impact on species or habitats susceptible to the proposed development.

Each of the other reports (e.g. botanist's, engineer's, hydrologist's) are paraphrased into a larger submission for the developer and relevant government agencies. Basically, this report details the recommended course of action that the firm believes the developer should take. And although the developer is not legally bound to the report, to ignore too many of the recommendations would give considerable lobbying power to those individuals and organizations opposed to the development.

### Some Problems

No system is perfect. But the means presently used to determine if the "ecological integrity" of an area to be developed will be negatively impacted by such development is so flawed that many basic improvements are immediately required.

The first problem with consulting is the over-reliance on rarity. Much of the business of development and control encompasses a theme of trade-off and compromise; certain areas can be "saved" and others "sacrificed". The existence of a rare or "significant" species often will justify the saving of that area. This has prompted many a consultant to find (and hope for?) something, anything rare. Obviously, if priorities are to be given, it will be for a threatened species. But what about the effects of cumulative loss? If, for example, the last 10 woodlots in a region each contain only common species (and thus each pose scant rationale to prevent development), the loss of those woodlots will make those previously common species considerably rarer. This non-integrated, piece by piece analysis of separate woodlots will result in a cumulative loss of critical habitat for species we now take for granted.

The rarity issue also brings into focus the problems of methodology, notably sampling. Was your coverage extensive enough or was the Red-shouldered Hawk present and you missed it? Or maybe the hawk is not present one year but would have returned in the next. Or the timing was wrong and breeding has finished. With these problems in mind, the potential for a species' presence

(rather than just occurred/not occurred) must be given more credence in the consulting process. More than one final report has been sent back by a government agency because a consulting firm, constrained by time, conducted a survey in the middle of winter and concluded no mammals or birds would be adversely affected!

The consulting process is similarly over-reliant on certain "types" of animals. Normally, whatever is noisy or visible gets counted. Singing birds and frogs, or deer pellets and coyote scats are easily counted if you choose the proper seasons, time of day, and habitat for your survey. However, secretive small rodents and bats are often undetected, but assumed, or not assumed, to be present. And insects are rarely surveyed. None of these types lend themselves to the "quick survey" common in the industry.

The second major problem is inherent to the system. In most cases, the consulting firm is hired by the developer (as opposed to a government agency). A consulting firm employing no-one but idealists, all totally opposed to development, is not going to attract much business. Such a situation can foster conflict of interest. Some of the pressure could be removed if, for example, a local government (municipal/regional) formed a standing committee that took an active role in monitoring and surveying areas to be developed.

There is also the problem, where, in certain cases, no trade-off or compromise is acceptable. An area may be too susceptible to disturbance, a species may be too rare, or the potential for damage too great to justify *any* development.

In projects such as these one may question involvement in a development that may be detrimental regardless of any degree of proposed mitigation. Such was the case a few years ago in Prince Edward Island where a proposed golf course and access to beaches used by breeding Piping Plovers (an endangered species) made national news. Regardless of any recommended controls (proposed by an environmental consultant) on numbers of people, timing, or type of vehicle allowed on the beach, the potential for damage to the plovers was too great and the proposal was denied. The point here is that development and its proposed mitigation was denied by government agencies, not by the consultants.

### **Two Opposing Views**

Environmental consulting can pose an ethical dilemma. People involved with consulting state that, without them, somebody less qualified would do it, or it may not be done at all. This is likely true. Secondly, environmental consultants mitigate the effect of development, they lessen its impact or advise against certain aspects. As a result, the consulting industry may, on average, increase the protection offered to the environment while still allowing development to occur in a controlled manner.

People against the development state that environmental consultants are part of a process that weakens the stance against certain kinds, or instances of development. They believe consultants are sugar-coating a problem by compromise and trade-off where no trade-off is acceptable. The label of "selling your soul" is

often applied to environmentalists who would be fighting the development if they did not work for the consultant/developer. All of this is arguably true. But, more importantly, it need not be.

The major criticisms of the consulting industry would be addressed by 1) improving and standardizing the methodology and content of surveys, 2) considering the regional context of species and habitat depletion instead of site specific analyses, and 3) removing the pressure of developers hiring consultants through greater government involvement.

Improving the industry is a means of improving the protection of natural areas. Development cannot be ignored, hoping, as we often do, that it will go away. But it can be controlled in a responsible way where both preservation and development are possible. Consulting, even with its problems, is still the best vehicle for controls on development. Improvement of the

consulting business can only give greater credence to the protective aspects of the industry.

The dilemma of the naturalist would also improve considerably with the implementation of these safeguards. But what about the role of naturalists as part-time consultants today? No clear answer exists because much of the dilemma is based upon your own personal ideologies. It seems simple enough. If you believe in compromise and moderation you may fit well into the consulting business. Conversely, if the loss of any natural area is unacceptable to you, be it relatively natural or degraded, then consulting is not for you. For those naturalists deciding to delve into consulting they need to follow just two rules; work only on specific projects and only with specific reputable firms. The thought that your effort and your methods could be responsible for protecting, or losing, a species from an area should dictate the quality of your consulting. Otherwise...

Graham J. Forbes, Faculty of Environmental Studies,  
University of Waterloo, Waterloo, Ontario N2L 3G1