

Investments as a lever for sustainable equilibrium between ecology and recreation at the Belgian coast

Bart Slabbinck

Natuurpunt
Kardinaal Mercierplein 1, B-2800 Mechelen, Belgium
E-mail: bart.slabbinck@natuurpunt.be

Abstract

Nature and tourism: it wasn't very often a very successful marriage at the European coasts. Like the Spanish 'costas', the Flemish coast was buried under concrete. This was of course devastating for the different vulnerable ecosystems and forced policymakers to take action. Not only did many countries start nature restoration projects like the Feydra-project in order to alter this trend. The problems were also tackled at the basis. Since the beginning of the nineties the tourism policy in Flanders did no longer focus just on the classic recipe of sun, sea and sand. Tourists also discovered the beauty of the polder-complex, tourists enjoyed bicycle trails,... This paper presents the evolution of nature and tourism 'from threat toward opportunity' / 'from conflict to dialogue' and vice versa. We will focus on four case studies spread over 15 years, showing the positive evolution of integrating rather than tolerating visitors in European Natura 2000-areas.

Keywords: Recreation; Nature conservation; Integrated coastal zone management; Flanders.

Introduction

Pour sauver les dernières parcelles qui ont gardé quelque peu de leur aspect primitif, il faut agir tout de suite. Car si l'on n'y prend garde, les cultures, les usines, les chemins de fer, les carrières, les villas,... auront bientôt tout envahi, et la génération qui nous suit ne verra plus les dunes littorales.

J. Massart (Pour la protection de la nature en Belgique, 1912)

At first glance nature and tourism seem to be a very good combination. Magnificent sunsets on the horizon or a beautiful dune 'panne' with flourishing orchids are arguments tourists cannot resist. Ironically, these elements, which provide a very attractive character, are often threatened by their own success (Tourtellot, 2004).

Since the introduction of paid leave in Belgium in 1936, coastal tourism has known an explosive growth. As a result of this evolution, at present day, the coastal region represents half of the economic tourism sector in Flanders. The dark side of this economic success has been the creation of a long 'floodline city' on the North Sea coast. Towns like Ostend and Nieuwpoort have been connected by large-scale creation of infrastructure such as roads, cutting through nature and leaving only scattered patches of old natural beauty behind. Fortunately, times are changing, and the loss of ecological

infrastructure had made many people realise change was needed, nowadays resulting in multiple projects in which tourism and nature are helping each other to flourish together. However, the road to success has been very long.

Firstly, we will discuss several projects which started in an atmosphere of conflicts in the mid 1990's, and nevertheless have resulted in a win-win situation for both nature and tourism. Secondly, we will look into two more recent projects, which have also started by focusing on goals related to a synergetic approach of nature and tourism.

The Flemish Dune Decree: one construction site too far

The end of the wild construction west

The Flemish Dune Decree might well be the perfect illustration of the conflict model of the early nineties. This decree has made sure the last threatened dune areas were protected by official environmental planning. In short, the decree designated 336a as 'protected dune area' (where 'hard' functions such as human residence were still possible until then) and 769a as 'agricultural areas important to dune areas'.

The dunes had been the victims of ground speculation, non-permitted constructions, pressure of recreation and unprofessional ecological management for decades. A giant 'Atlantic Wall' emerged from the nature reserve 'De Westhoek' in De Panne all the way to the old swimming pool of Knokke-Heist 66km to the northeast. The mere sight of this structure would make many foreign constructors doubt their own profession. Of the original 6,000a of dune areas in the early 20th century only 2,830a of scattered dune areas are left (Provoost *et al.*, 2003). This includes the two largest dune areas 'Westhoek-Calmeynbos' and 'Het Zwin', which account already for 870a, and many smaller dune patches which have lost much of their ecological value. This means that even Flanders' largest dunes reserve 'De Westhoek' does not have enough space for typical dune-dynamic processes to take place (Herrier, 1994). The rise of fisherman's house-style buildings was unstoppable and the concrete mills hardly ever stopped pouring their production over the dunes. The broker sector was at a record high, but the following question rose '*would tourists continue to visit a coast covered by concrete?*' (ETC, 2003).

Nature conservation organisations and luckily the Flemish Council and the Flemish Government realised that it was not almost, but already too late for nature conservation and urban planning. The so-called 'Decree Issuing Measures for the Protection of Coastal Dunes', more popularly known as the 'Dune Decree' could be considered as an emergency measure to protect the few there was left of the dunes right at the end (Herrier, 1994).

Ten years of Dune Decree: a reason for celebration?

Despite the acquisition of a quantitative equilibrium by protecting natural equity, there was no qualitative protection because of the absence of a well-funded maintenance obligation for landowners. This meant that still more than 75% of Flemish dunes were managed without concern for natural conservation in mind in 1999 (Provoost, 1999). Nevertheless, we feel the Dune Decree has been a U-turn milestone for the Flemish coast.

The Decree's merits notably are:

- Although the dune decree has not been really connected to the ruling nature legislation (which could have created new opportunities for other endangered biotopes), the decree still was a big legal step forward in linking urban planning and nature conservation. Until the mid 1990s both policy issues urban planning and nature conservation had been rather strictly separated. The new link was a step forward for the management of the coast because it did not stick to strict policy domains or on-the-spot decisions.
- Another stimulus for the Decree has been the use of scientific data for its preparation. The Belgian Institute for Nature Conservation prepared the Dune Decree in 1993 by making an inventory of the difficult issues concerning the relation nature conservation - regional urbanisation designating plans (called 'gewestplannen') (Kuijken *et al.*, 1993). This inventory was a very strong argument backing the politicians behind the dune decree not to succumb to the lobbying of various stakeholders.
- Finally, the dune decree was a 'revolutionary' U-Turn for nature recovery. The dunes were/are so badly damaged that an area equilibrium was no longer sufficient. In the slipstream of the Dune Decree steps were taken to systematically acquire and restore dune areas. Results became quickly visible. Examples include the demolition of the building 'Home George Theunis' in a coastal dunes nature reserve 'Ter Yde' near the city of Oostduinkerke, the demolition of 'Home Fabiola' in the Zeereep dune area of Ostend, the sanitation of illegal campsites or the construction of sluifers in the city of De Panne and the demolition of the 'Swimming Pool' building in Knokke-Heist. The River IJzer Estuary Project also came a step closer to realisation thanks to the Dune Decree (Deboeuf and Herrier, 2002).

In short: the dune decree has created the first win-win situation for nature and tourism.

The River IJzer Estuary: nature as a catalyst for tourism

Seal Plan ('Plan Zeehond'): a sustainable alternative to concrete

When a Belgian Naval Base was allocated from the IJzer Estuary in the mid 1980s rumours came about concerning the new designation of the area. Wild dreams even changed 124a into a 500 boat-yachting port with a neighbouring bungalow-'park'. Even before the 1993 Belgian government's decision to move the naval base a plan had been published to build a port with a connecting road cutting off (and thus eliminating) the then 50a nature reserve (with only 10a salt marshes).

The non-governmental organisation managing the area (Natuurpunt) immediately raised the alarm and launched Plan Zeehond (Seal Plan), which was supported by several scientific studies, and served as a statement that it is not necessarily concrete which suits the coast or attracts tourists best.

Every change in designation of the area which would damage the ecological value of one of the last salt marshes in Flanders would be beyond discussion. (Bossu, 1993).

This plan was a U-turn concerning the 'classic' approach of nature conservation organisations. Not only was there a firm 'no' to the yachting port, the 'no' was combined with a positive action plan. The action plan contained suggestions for a sustainable designation of the IJzer Estuary, the only estuary in Belgium, which could see a future

return of a seal population. The proposals in the plan were not only nature-technical (involving demolition of military infrastructure, digging down raised ground areas,...) but also involved the educational value of the area.

From dreams to reality (including tourism)

Thanks to the efforts of the Flemish Community and with support of the LIFE-Nature-project 'Integral Coastal Conservation Initiative' and the second LIFE-Nature-project 'Fossil Estuary of the IJzer Dunes Restoration Action' the 'plan seal' quickly became reality (Herrier *et al.*, 2005).

Now that the nature restoration project has ended, a new challenge for the area immersed: nature-oriented recreational co-usage. The IJzer estuary is one of the spacious tissues in the urban network of the city of Nieuwpoort (and – in a broader perspective – the entire coastal area). From the city's western riverside magnificent views of the reserve can be enjoyed. The yachts navigating upstream also enjoy sights of the natural estuary which is very rare in Western European ports.

With the arrival of tourists there is also a higher demand for 'greener' outings and excursions. The real nature lovers had already discovered the salt marsh area before the nature project, but for many other people nature is also synonymous to resting, vacation, escaping the rat race,... Recreation can also create a broader support for nature conservation projects (Rens, 1993; Staatsbosbeheer, 2004). A new win-win situation was in clear sight.

In 2004, the River IJzer Estuary Nieuwpoort Project, which is supported by the Coast Action Plan 2000-2004 and is coordinated by the regional government's tourism organisation Westtoer started with elaborating a visitors' access plan for the Flemish nature reserve 'De IJzermonding' ('IJzer Estuary'). The access plan was realised in cooperation with all parties involved, and includes proposals for improved internal and external access to the reserve, along with better infrastructure for the education of nature and general information. Realisations have not taken long to come into being. Nature-oriented recreational tourists have discovered the reserve for the first time in decades thanks to the construction of hiking and cycling paths. Westtoer organisation and The Flemish Tourism Association have supported the placement of information panels, bicycle 'parksites' and sitting benches in the nature reserve.

The nation-spanning interregional IIB project 'Frame' has planned the construction of a bird observatory platform and studies which will investigate the possibility for the reserve to expand. In 2006 a new bicycle and pedestrian boat will cross the river's estuary and the highest point of the former military dam will become an observation site (Provoost T., 2004).

The IJzer Estuary, a natural port

The project started from a constructive plan by a NGO, supported by scientific reports and kickstarted by the Flemish Community, that made the IJzer Estuary an example for synergy between nature and tourism. Although there might not exist a port for 500 yachts in the estuary at present, the estuary certainly has become a safe haven for many endangered animal and plant species. Not that the project excluded the neighbours of the estuary: they were involved, and conservationists, hotel and bar owners, yachting

ports,... discovered the win-win situations more quickly. This had been different at the time of the Dune Decree, where people involved such as brokers 'had been made happy against their will'. This time all noses pointed to the same direction.

The coast cycling route: in many aspects a cutting edge project

The coast cycling route symbolises the idea of the coast action plan

Until the mid nineties the sky really seemed to be the limit which resulted in e.g. still increasing numbers of employment in coastal tourism. But this perception was changing rapidly and at the end of the nineties the region was facing an obsolescence of its tourism 'product', seasonally strong fluctuations in employment (Westtoer, 2004) and an ongoing deterioration of existing nature (Baeteman, 1995). In order to alter these trends into a more sustainable form of coastal tourism an investment plan was created, called 'Coast Action Plan'. Several projects could profit from this plan on the condition that each initiative optimally supported the quality and image of the coast as a whole and provided that each initiative optimally supported the quality and image of the coast as a holiday destination. Until that time many initiatives had been running simultaneously without being coordinated, and communal authorities had each implemented their own policies in a relatively separated way. But this time all the different initiatives were rallied behind the same flag (there actually IS a flag!). Support was offered to projects such as a website portal promoting the Flemish coast as an experience or to a sustainable way of public transport 'De Kusttram' (a tramway along the coast). Another example of this new coordinated approach has been the coastal cycling route which is being realised by Westtoer. The route will run through (practically) all coastal communities and will show the recreational cyclists examples of the best the coast has to offer, at reasonable cycling distances (Gilté, 2004). This includes dunes, typical 'polders', beautiful architecture,... This route which leads cyclists across different communities continues to optimise and diversify the tourist-recreational product 'coast'.

Case study 'Sint Jans Ader'

Establishing an attractive and safe route along the coastline is a real challenge. Moreover, this route will also have to be an important connection axis between the different coastal towns. The cycling route will also have to serve as a starting point for trips into the 'back country'. Finally the route will have to be part of and be connected to the international 'North Sea Cycling Route'. The combination of these factors makes sure a multiple stakeholders project comes into being, involving local councils, road maintenance organisations and many local people involved. A good example of a reached equilibrium between the different parties involved is the elaboration of a part of the coastal cycling route between the towns of Blankenberge and Zeebrugge. Between these two coastal towns there was no attractive route available and this meant a new route had to be found. After thorough discussion the option of expanding the cycling route through the area between the Kustlaan and the Graaf Jansader roads was selected. In addition, the elaboration of the route had not been organised lightly.

The following factors have been taken in account:

- Comfort and safety: the cycle path cannot be constructed next to the Kustlaan avenue but will be constructed on a specially selected new route, three (comfortable) metres wide.
- Attractiveness of the route: next to the cycle path we find the Oudemaarspolder and the Zeebos which are attractive assets for cyclists' eyes. As a consequence, recreation will be promoted by placing three bird watching walls and an observation platform.
- Surplus value for nature. Several visits by the Belgian Institute for Nature Conservation and others have revealed that the ecological value of the area is quite low, but that it has a big potential, which is demonstrated by the presence of certain plant species. The bird population will be able to thrive when elder or sea buckthorn are planted across the area. The neighbouring grassy patches also have potential – if mowed properly – for the development of calcareous grasslands.
- The coastal cycling route serves as a starting point for trips through the back country, and is connected to the cycle network of the Greater Bruges' area.

Again, this has been a (highly tangible) example of the synergy between nature and tourism.

Nature and landscape – surplus value for tourism and the Flemish Coast (and vice versa)

Natuurpunt and nature-oriented recreation on the Flemish coast

Certainly, the search for equilibrium between nature and tourism continues as we speak. Also for us as a nature conservation organisation this entangles substantial changes. In this last case study we will focus on a nature-tourism project started by our NGO Natuurpunt.

Natuurpunt, the Flemish representative of Birdlife International, has many years of field experience in the coastal region. In the eighties the dune workgroup was founded, focussing on government policies, as the natural value of the region was being severely threatened. Actions around the dune decree, drinking water extraction from the dunes,... etc. were being organised in an ever faster pace. At the same time local branches were set up at the coast, which were at first mainly oriented towards policymaking and guiding people through nature.

The last few years nature-oriented recreation has become increasingly important. Although this is not really our core activity, we do have experience in this matter, which is being expressed by one of our slogans 'Natuurpunt: nature for everybody' which bears a dimension of 'accessibility'.

Nature for everybody: the quest

Throughout Flanders we are being confronted by the gaining importance of this slogan/baseline, since we have been facing several evolutions in recent years.

We will briefly discuss the main evolutions :

At the 'offering nature' side we can observe two major evolutions:

- An ever increasing number of visitors' centres is opening its doors, along with a rise in guided tours through nature reserves. However, this does not necessarily mean the target audience is broadening: Already some years ago (foreign) researchers found that education in nature reserves is too much aimed at those who already have an extensive knowledge of nature (Margadant-van Arcken, 1993). The focus of education is in too many ways sticking to 'numbers and names' (Van Martre, 1990). Although we do not have carried out similar research in Flanders we feel from our field experience that this is true.
- More and more groups are getting involved in the debate. This latter trend may seem surprising since Flanders's nature policy initially was no multi actor policy at all (it was largely directed by a coalition of scientists and nature conservationists – *e.g.* the elaboration of the Dunes Decree). As the debate proceeded, new actors appeared on the scene (farmers, private land owners,...). In contrast with the first players those new actors belong to challenging coalitions (Bogaert, 2004; Bogaert and Cliquet, 2002).

On the demand side (tourists-recreationists) we obtained new insight thanks to new research.

- We see a great public's awareness of the environmental problems at the coastal region (Doyen and Bachus, 2003) and an increase in nature-related holidays. Surprisingly, this doesn't mean that there is a growing public support. Recent research showed us that although we see a discursive renewal on the concept 'public support', nature policies on the whole do not pay too much attention to the active dimension on 'public support' or to new or additional opportunities for participation (Bogaert, 2004)
- This latter evolution perhaps looks surprising in the context of the newest insight in the field of creating public support for nature conservation and environmental protection: several research projects have shown that positive experience with nature at a young age are fundamental for the development of long-term natural involvement and environmentally friendly behaviour. (Palmer *et al.*, 1999). In addition it is important to realise that people taking part in nature education activities almost always do this out of self-motivation. Most visitors do not come to learn, but to enjoy themselves in nature. As a consequence, the motivation of visitors should be the main axis when creating nature education projects. (Steeghs, 1999).

To conclude we might say that the hardware (*i.e.* nature reserves, visitors' centres) has enjoyed much attention for nature-oriented recreation, though the software (*i.e.* communication, participation) has not.

LIFE-Nature: communicating with stakeholders and the general public

The European Commission faced the same problems when elaborating Natura 2000. When elaborating this network they broke with the traditional top-down approach of classic nature reserves, where people were tolerated rather than integrated. Natura 2000 is therefore in fact more about saying 'take note – this is our common heritage' rather than 'keep out – this is for wildlife not people'. Natura 2000 therefore puts people at the heart of the process rather than its periphery. This principle of collaboration is enshrined in the Habitats Directive, which requires that conservation measures 'take account of the economic, social and cultural requirements and the regional and local characteristics of the area' (European Commission, 2004).

Welcome to the green experience economy

These new trends and insight have also brought about a new view to our slogan 'nature for everybody'. Thanks to the Coast Action Plan we were allowed to work even more intensively around our slogan and to elaborate new projects which can serve as an example to this perspective. The project was called 'nature and landscape, a recreational surplus value for the coast (and vice versa). In Dutch: 'natuur en landschap, een recreatieve meerwaarde voor de kust (en vice versa)' was started on 1 April, 2004.

We decided to create suitable software, that is, a new methodical approach, since we lacked experience with accessibility plans and tourism projects and were confronted with new tendencies as described above. With the marketing slogan 'talk the walk and walk the talk' in mind we decided to adapt ideas in the field of the experience economy, which have quite a (negative) reputation with marketing people (Pine and Gilmore, 1990). Both authors state that a shift is taking place from a service-based economy to an experience-based economy, similar to the shift from the product-oriented economy to the service-oriented economy. Some examples from advertising to prove this: 'don't sell a car, sell freedom', 'don't sell make-up, sell hope'. Translated to the world of nature conservation one might say it is all about offering visitors real nature experiences. *Wasn't it a 'spark' or an 'aha-effect' which made our own volunteers choose for nature protection?* (Chawla, 1998).

This might seem all too theoretical, but in the practical elaboration of visitor access plans we worked with an interpretive planning process where we focussed on visitors and less on the site itself (Veverka, n.n.), which is the opposite of the habitual procedure (where planners often started from the wishes of the people who paid for the project). In other words, the end product of a successful visitors' centre would not be the creation of a building, but the activities that take place in and around the building (SNH, 1996). These activities should of course be a mix of entertainment ('nature should be fun'), education ('they should learn basic insights on e.g. biodiversity), aesthetic ('spark-effect') and escaping daily life ('nature is one big adventure'). If we apply Natuurpunt's vision of 'experience' to the framework Pine and Gilmore offer us, we can say that 'experience of nature' means the following to Natuurpunt:

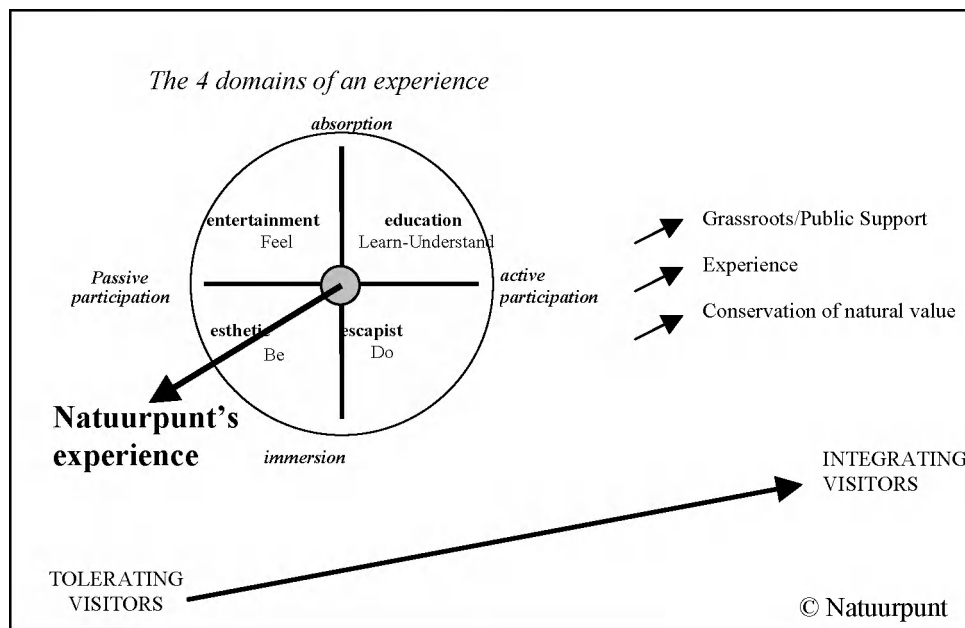


Fig. 1. Natuurpunt's vision of experience of nature.

In the light of this new working method we have started a coordinated education process for our volunteer force. Below you will find a short description of this process in the nature reserve 'Uitkerkse Polder'.

Case study: Uitkerkse Polder, 'a wide wide world of pasture birds'

The new insights as described above were first tested in nature reserve Uitkerkse Polder. In this nature reserve, we could profit from the LIFE project 'Uitkerkse Polder, for nature and people', which was already running and also included the creation of an array of visitors' infrastructure. We put all the insight gathered as described above into an interpretive planning process and organised a brainstorming session around the central question: 'how can we improve the experience of visitors, guests, customers.... etc.?' We kicked off by brainstorming about the communication slogan of the Uitkerkse Polder starting from the key elements of the nature reserve:

- 'wide', nature reserve Uitkerkse Polder is a landscape with wide views (which are scarce in Flanders; a highly urbanised region);
- 'pasture – salty plantlife', Uitkerkse Polder boasts several types of salty vegetation types which are selected for the Habitat Directive of the European Union;
- 'birds', Uitkerkse Polder is famous for its pasture birds and its attractiveness as a wintering site for geese and hence selected by the Bird Directive of the EU;
- 'world', Uitkerkse Polder has been included in the Nature 2000-network thanks to its acknowledged value as described above.

The result of this brainstorming session was the slogan: ‘Een weidse wereld vol vogels’ (with the double meaning of the Dutch word ‘weidse’ which bears both the significance of ‘pasture’ and ‘wide’ carried all the aspects as described above). ‘A wide wide world of pasture birds’ is a possible English translation.

This slogan, and its message were used as the basis for the accessibility plan. The slogan was used as a communication tool to make the nature reserve more known with the general public, and also to be used as a strategic compass to create visitors’ infrastructure. In this respect, an observation tower will be constructed to translate the ‘wideness’ into an experience for visitors. We will also present the Nature 2000 project in an exhibition room, which will make visitors realise the nature reserve is indeed a ‘wide wide world of pasture birds’.

This approach does not mean we will not have attention for natural value. Oppositely, we will create a zone plan which we feel is going to create a real win-win situation for nature, tourism and neighbours. To conclude we would like to demonstrate that in the Uitkerkse Polder nature reserve nature can also be a pulling factor for tourism. Several integrated projects have been planned, including the creation of a ‘green tourism arrangement’ (involving local shopkeepers, bars, hotels,...), the planning of a ‘walking route between green stops’ (together with public transportation companies),... etc. In short, a project by which we want to create synergy between nature and tourism.

Conclusion

The title of this paper will have made many people raise their eyebrows: ‘Investments as a lever for ecology?’ Wasn’t it corporate cash that made the Flemish coast into one giant construction site?

In this paper we demonstrated that there was indeed a situation of conflict between nature and tourism. That a long road has indeed been travelled since the dune decree and that we – from the nature conservation point of view – are indeed still seeking for an equilibrium between nature and tourism. We can’t state that all is peace now: conflicts still occur (examples include a media hype around the closure of an illegal campsite in the middle of the dunes) or the conflict of the closure of nature reserve Baai van Heist a few years ago). Nor is everything perfect: many years of work still lay ahead: dismantling illegal campsites, dune recovery by destructing roads as has already been done in nature reserve d’Heye,... etc.).

Nonetheless, we feel that many very important policymaking decisions have been taken during the last 15 years. After many years of non-existing policy concrete results became visible. The mere definitive approval of the Dune Decree has shown a huge U-turn in the official coastal policy. Who could have dreamed the desire for nature would have been stronger than the power of constructors, housing brokers,...?

One of the key factors for success has certainly been the scientific support. The Dune Decree was approved, withstood criticism in the Belgian High Council (Conseil d’Etat) because the founders had foreseen possible criticism by basing the Decree on objective grounds only. In the same time the green urban planning decree ‘Groene Hoofdstructuur’ did not manage to pass the High Council. These examples of mere victory and defeat should be an important lesson for conservationists in Flanders.

Another key factor – which has been increasing in importance in recent years – is public support. The gridlock situation ‘the good, the bad and the ugly’ between private companies, government and NGOs is on its way to becoming history. This thanks to the constructive approach of NGO’s like Natuurpunt (*e.g.* Seal Plan), visionary politicians and the many recent example projects. Time has come for a full-scale creation of integrated coast management, where actions are not taken on the spot nor for just one party’s benefit. Natuurpunt is fully committed to support example projects port and nature, tourism and nature,... actively.

The quest continues ...

Acknowledgements

Tim Provoost and Michel Gilté, Westtoer; Peter Bossu and Guido Vandenbroecke, former coordinators for Natuurpunt West-Vlaanderen; Fre Maes and Jurgen Van Praet, former staff member at cabinet of Minister of Tourism; Sam Provoost, Instituut voor Natuurbehoud; Peter Symens, Steven Van Holme and Stefan Versweyveld, Natuurpunt; An Cliquet, Ghent University

References

- Baeteman C. 1995. De conflictsituatie tussen natuur en toerisme in het kustgebied. De Aardrijkskunde 3.
- Birdlife International. 2004. Educating for Birdlife
- Bogaert D. 2004. Natuurbeleid in Vlaanderen. Natuurontwikkeling en draagvlak als vernieuwingen?
- Bogaert D. and A. Cliquet. 2002. Draagvlakonderzoek bij natuurontwikkelingsmaatregelen. Beleidsgerichte analyse en voorstellen tot het optimaliseren van juridische en maatschappelijke instrumenten voor natuurontwikkelingsprojecten. VLINA 99/08
- Bossu P. 1993. Het Plan Zeehond.
- Chawla L. 1998. Significant life experiences revisited: A Review of research on sources of environmental sensitivity. Journal of Environmental Education 29(3):11-21.
- Deboeuf C. and J.-L. Herrier. 2002. The restoration of mudflats, salt marshes and dunes on the eastern bank of the IJzer-rivermouth, Nieuwpoort. Littoral 2003, Eurocast, Porto – Portugal.
- Doyen G. and K. Bachus. 2003. Draagvlak duurzame ontwikkeling kuststreek – Een kwantitatieve en kwalitatieve analyse.
- European Commission. 2004. LIFE-Nature: communicating with stakeholders and the general public.
- European Travel Commission (ETC). 2003. Trends for Tourism in Europe.
- Hoffmann M. 2004. De monding van de IJzer in ere hersteld. De Levende Natuur, september 2004.
- Gilté M. 2004. De kustfietsroute: een nieuwe recreatieve as langs de kust (not published).

- Herrier J.-L. 1994. Het duinendecreet en de ruimtelijke ordening aan de kust. Symposium 'Kustdag – Tussen Land en Zee'.
- Herrier J.-L. and H. Van Nieuwenhuyse. 2005. The Flemish coast: life is beautiful! p.13-26. In: Proceedings 'Dunes and Estuaries 2005' – International conference on nature restoration practices in European coastal habitats. Koksijde, Belgium, 19-23 September 2005. Herrier J.-L., J. Mees, A. Salman, J. Seys, H. Van Nieuwenhuyse and I. Dobbelaere (Eds). VLIZ Special Publication 19. xiv + 685p.
- Kuijken E., J.-L. Herrier and M. Leten. 1993. Inventaris van de knelpunten tussen het natuurbehoud en de gewestplannen in de duinstreek van de Vlaamse kust.
- Margadant-van Arcken M. 1994. Natuur en milieu uit de eerste hand. Den Haag: SDU Uitgeverij.
- Matre S. van. 1990. Earth Education, a new beginning. Institute for Earth Education, Greenville/West Virginia USA.
- Palmer J.A., J. Suggate, I. Robottom and P. Hart. 1999. Significant life experiences and formative influences on the development of adults' environmental awareness in the UK, Australia and Canada. In: Environmental Education Research 5(2):181-200.
- Pine and Gilmore. 1999. The Experience Economy: Work is theatre & every business a stage. Harvard Business School Press
- Provoost S. 1999. Het duinendecreet, onze duinen beschermd. Natuurrapport 2001. Instituut voor Natuurbehoud.
- Provoost S. 2001. Kustduinen. Natuurrapport 2001, Instituut voor Natuurbehoud.
- Provoost S., E. Stienen, L. Debruyne and J.-L. Herrier. 2003. Natuurrapport 2003, Instituut voor Natuurbehoud
- Provoost S. and W. Van Landuyt. 2001. The flora of the Flemish coastal dunes (Belgium) in a changing landscape.
- Provoost T. 2004. Bezoekersonthaalplan De IJzermonding.
- Rens. 1993. Recreatie en natuur: een kansrijke combinatie. p.173-175. In: Natura.
- Scottish Natural Heritage. 1996. Visitor Centre Guide.
- Staatsbosbeheer. 2004. Visie op recreatie en beleving van natuur en landschap.
- Steeghs M. 1999. Earth Education biedt nieuwe kijk op natuureducatie. p.248-251. In: De Levende Natuur, 100ste jaargang 7.
- Tourtellot J. 2004. Destination Scorecard.
- van Arcken M. 1993. Natuurbeelden en Natuurbeleving van Kinderen en Jongeren.
- Veverka J. n.n. Interpretive planning for the next millenium – The 'product of the product'.