

RECENSIONI



JEREMY RIFKIN.

Ecocidio. Ascesa e caduta della cultura della carne.

A. Mondadori, Milano, 2001, pp. 385, E 18,08

Come consumatori, eravamo stati messi in guardia dai rischi sanitari di un'alimentazione eccessivamente carnea, ma forse non immaginavamo che l'allevamento bovino potesse avere ripercussioni sconvolgenti sugli equilibri del pianeta.

Il volume inizia con un excursus storico, mostrando come i bovini, in 4-5000 anni, siano passati dallo status di divinità a quello di merce, riflettendo il passaggio culturale dal sacro al profano.

I primi impatti ecologici su vasta scala iniziarono nel XVI secolo quando, a seguito della crisi dell'allevamento bovino in Spagna (foreste abbattute per far posto ai pasco-

li e loro desertificazione per sovrappascolo), i bovini furono introdotti nel Nordamerica e in Argentina, per sfruttare le immense praterie vergini. Lì invasero il continente, alterando ogni nicchia ecologica. Così, mentre i pascoli del vecchio continente erano esauriti da tempo, nelle pampas i bovini erano così numerosi che la loro carne non aveva più alcun valore: intere mandrie furono massacrate per prelevare pellame e sego, lasciando la carne a decomporsi. La soluzione venne nel 1878, quando la prima nave refrigerata salpò dall'Argentina verso Le Havre carica di carne fresca, rivoluzionando la storia alimentare. Da quel giorno le pampas del Sudamerica divennero i nuovi pascoli d'Europa.

La conquista del West -uno fra i capitoli più sordidi e vergognosi della storia americana- è una storia di malversazioni finanziarie, furti di terre e accordi clandestini orchestrati negli uffici commerciali britannici per garantire agli inglesi quantità di carne sempre maggiori. Per riservare le immense praterie del West al pascolo dei bovini, il bisonte delle Grandi Pianure fu sistematicamente sterminato e i popoli indigeni furono massacrati e rinchiusi in riserve.

La costruzione della ferrovia consentì ai nuovi signori della carne di realizzare un cambiamento radicale nella prassi agricola: il confluire su grande scala di zootecnia e cerealicoltura. Per soddisfare i consumatori britannici -che preferivano la carne rossa abbondantemente venata di grasso- le mandrie di bovini allevate nel West furono trasferite, prima della macellazione, nel Midwest per l'*ingrasso* a base di mais.

L'aumento della domanda di carne in Europa e negli Stati Uniti nel secondo dopoguerra rilanciò l'interesse per i territori del Centroamerica e del Sudamerica: la foresta pluviale amazzonica fu così tagliata e bruciata per creare nuovi pascoli. Oggi le multinazionali dell'alimentazione stanno già cominciando ad *assemblare* i bovini come si assemblano le automobili, miscelando i fattori di produzione provenienti da vari paesi -semi, cereali, farmaci, embrioni animali, macellazione automatizzata, marketing su vasta scala e distribuzione al dettaglio- in un'unica attività coordinata, mirando alla standardizzazione del prodotto.

Numerosi paesi in via di sviluppo sono colpiti da questa nuova forma di sfruttamento coloniale: immense estensioni sono dedicate al pascolo del bestiame o a colture per mangimi animali (mais, soia, sorgo): per soddisfare il mercato dei paesi ricchi si espellono dall'agricoltura di sussistenza grandi masse di persone, in paesi che già soffrono di denutrizione cronica.

L'allevamento bovino moderno, infatti, è un settore a fortissima intensità di capitale: se la piccola agricoltura sostiene un centinaio di persone ogni 3 km², l'allevamento bovino tropicale medio occupa un addetto per 2000 capi di bestiame, cioè una persona ogni 30 km². Ogni incremento dell'allevamento bovino accentua perciò la fame nel mondo, espellendo agricoltori dalla terra. Preoccupa che in quasi tutte le nazioni l'incremento dei livelli di reddito sia andato di pari passo con l'aumento dei consumi di carne bovina, sebbene i bovini siano tra i convertitori meno effi-

cienti d'energia: per fare un kg di carne di manzo all'ingrasso ci vogliono 9 kg di mangimi, per produrre 50 kg di proteine si consumano 790 kg di proteine vegetali.

L'alimentazione a cereali dei bovini è un fenomeno recente, senza precedenti nella storia dell'agricoltura, con un impatto sulle politiche d'uso della terra e della distribuzione del cibo superiore a quello d'ogni altro evento della storia moderna. Se i cereali e la soia per l'allevamento fossero convertite per l'alimentazione umana, fornirebbero una ciotola di cibo al giorno per ogni essere umano del pianeta. L'iniqua catena alimentare artificiale condanna alla fame miliardi di diseredati. Contrariamente a quanto di solito si crede, ogni anno i poveri diventano più poveri.

Ma questo prezzo è solo un aspetto di una minaccia ancor più grave: una minaccia ambientale che mette in discussione la stessa possibilità di sopravvivenza dell'ecosistema terrestre. L'allevamento bovino, infatti, è una delle minacce ambientali più distruttive dell'era moderna: i bovini sono responsabili di gran parte dell'erosione e della desertificazione dei suoli, della distruzione delle foreste pluviali superstiti, del rapido esaurimento dell'acqua potabile del pianeta; sono la fonte principale dell'inquinamento organico delle acque, esercitano una pressione senza precedenti sull'ecosistema, portando un numero crescente di specie selvatiche sull'orlo dell'estinzione e sono un fattore non secondario nel processo di riscaldamento del pianeta.

Il trapianto dei bovini nel Nuovo Mondo ha profondamente mutato l'ecologia delle Americhe: al loro seguito, un intero complesso di erbe, cereali, legumi del Vecchio Continente si è impiantato nel nuovo, sconvolgendo la vegetazione originaria. Dal 1960 immense foreste

sono state abbattute per far posto a pascoli bovini. La foresta amazzonica viene distrutta ad una velocità impressionante. Ma il suolo tropicale è estremamente fragile e, dopo 3-5 anni di pascolo, diventa sterile e gli allevatori abbattano un'altra sezione di foresta per spostarvi le mandrie, incuranti del fatto che in questo habitat dimori forse il 50% delle specie viventi sul pianeta.

L'apparentemente innocente vacca da carne è al centro di un ciclo di distruzione ecologica: ogni hamburger comporta l'abbattimento di 6 m² di foresta. L'inarrestabile desertificazione indotta dall'uomo ha costi umani incalcolabili: imprigiona milioni di famiglie in una perversa spirale di miseria e produce esodi di proporzioni bibliche.

Sfortunatamente, i costi ambientali della cultura della bistecca non si consolidano nel prezzo della carne, ma sono scaricati, sotto forma di debito ambientale, sulle generazioni future. Ogni kg di bistecca costa 35 kg di suolo eroso; oggi i territori del West producono meno della metà della biomassa rispetto

a cento anni fa, prima della grande invasione bovina; specie animali e vegetali sono scomparse per il pascolo e l'uso di erbicidi; fiumi maestosi sono ridotti a rigagnoli. In molti paesi, compresi gli Stati Uniti, nonostante l'abbassamento delle falde e il prosciugamento di fiumi, manca ancora la consapevolezza del ruolo rivestito in questi processi dall'allevamento bovino.

In Africa, l'allevamento - con la connessa perversa trivellazione dei pozzi profondi e il sovrappascolo indotto - è un fattore determinante della desertificazione. La deforestazione per nuovi pascoli, gli otto litri di benzina necessari a produrre un kg di carne bovina, l'emissione di metano dall'incremento della popolazione bovina e di termiti (favorite dalla deforestazione), contribuiscono all'effetto serra.

Indubbiamente, il libro di Rifkin offre un punto di vista insolito, quanto sconvolgente, sulla nostra cultura della bistecca, in ogni caso sufficiente a giustificarne il titolo: ecocidio.

Giuseppe Sansoni



CIRF

Manuale di riqualificazione fluviale

Mazzanti Editori, Venezia, 2001, pp. 108, E 31,00.

Inghilterra, 1995: due tratti di poche centinaia di metri di due piccoli fiumi profondamente manomessi dall'uomo (il Cole vicino ad Oxford e lo Skerne vicino a Darlington) vengono risistemati secondo un nuovo approccio interdisciplinare che parte dal presupposto che per

avere fiumi vivi, sani e sicuri bisogna lasciare loro il giusto spazio e permettere loro di funzionare secondo le dinamiche naturali.

È l'inizio della *River Restoration* (*Riqualificazione Fluviale*) in Europa, un processo che dopo pochi anni ha già coinvolto centinaia di fiumi in tutto il Continente e sta cambiando dalle fondamenta l'approccio alla gestione dei corsi d'acqua. Volutamente, in poche centinaia di metri, i progettisti del River Restoration Center inglese hanno concentrato esempi dei principali tipi di intervento utilizzabili per riqualificare un fiume.

I due progetti, infatti, sono stati pensati e realizzati, con l'aiuto dei

fondi del programma europeo LIFE, come "interventi pilota", finalizzati a creare casi pratici da imitare ovunque vi siano corsi d'acqua naturali od artificiali il cui ambiente e le cui funzionalità idraulica ed ecologica possono essere migliorate applicando le tecniche della riqualificazione fluviale.

Il manuale, organizzato in schede tematiche di grande chiarezza didattica e riccamente illustrato, mostra in modo dettagliato le tecniche adottate nei due progetti inglesi, fornendo al lettore tutti gli elementi per ripeterle ed adattare ai diversi contesti applicativi.

La pubblicazione del manuale da parte del CIRF (Centro Italiano per

la Riqualificazione Fluviale) con Mazzanti Editori ha lo scopo di stimolare chiunque si interessa di fiumi, per lavoro o per impegno civile, a ripetere l'esempio dei fiumi Cole e Skerne: realizzare piccoli interventi dimostrativi di riqualificazione, per permettere ai cittadini, ai tecnici incaricati della gestione dei fiumi, agli amministratori di toccare con mano i benefici di un fiume vivo e sano: sicurezza idraulica, capacità depurativa, habitat per la vita selvatica, spazio per la ricreazione ed il tempo libero.

Per le modalità d'acquisto (€ 20,66 per i soci CIRF), visitare il sito www.cirf.org

Giustino Mezzalana



José Bové, François Dufour

Il mondo non è in vendita.
Agricoltori contro la globalizzazione alimentare

Feltrinelli, Milano, 2001, pp. 212, E 6,20.

Nell'agosto 1999, a Millau (Francia), un gruppo d'allevatori di capre irrompe nel cantiere di un McDonald's in costruzione e lo smonta, per protesta contro la multinazionale che colpisce la loro fonte di reddito, il roquefort, vittima delle rappresaglie americane scatenate dal rifiuto europeo di importare carni di manzo agli ormoni. Fin dall'inizio, la protesta degli allevatori si salda a quella dei consumatori, che intendono difendere la salute e la qualità dei cibi.

José Bové, agricoltore e sindacalista che capeggia la protesta, viene condannato, ma rifiuta di pagare la cauzione per uscire di prigione. La sua foto -le braccia alzate sopra la testa, le manette ai polsi, un sorriso radioso- diverrà un simbolo: quello di un mondo in catene, ma in cui la rivolta è legittima e

necessaria.

La battaglia prosegue a Seattle, per la globalizzazione della democrazia, da contrapporre allo strapotere del WTO. Sull'orizzonte della globalizzazione si profila un'inedita alleanza tra agricoltori, consumatori ed ecologisti, per rivendicare un'agricoltura più attenta all'ambiente e una produzione alimentare più attenta alla salute.

In tempi di mucca pazza, organismi geneticamente modificati, brevettabilità dei viventi, carni con ormoni, antibiotici, diossina, alimenti con residui di pesticidi, e così via, la lotta contro la "malalimentazione" non è più una battaglia corporativa di allevatori e agricoltori, ma diventa una priorità per l'intera società civile.

Il libro è un'intervista ai due autori. Le risposte, profonde nei contenuti, sono cariche d'entusiasmo e di fiducia nella capacità di saldare gli interessi degli agricoltori dei paesi ricchi con quelli dei paesi poveri:

una denuncia a tutto campo delle logiche perverse dell'agricoltura industrializzata, degli effetti delle regole imposte dal mercato (dettate dalle multinazionali, al di sopra degli Stati) e della stessa politica agricola europea.

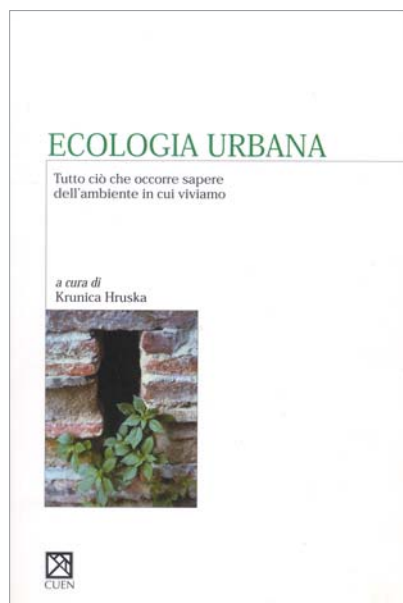
Da segnalare l'interesse del muta-

mento di prospettiva: una battaglia in difesa dell'ambiente condotta non più dai "cittadini" contro gli agricoltori, ma promossa dagli stessi agricoltori. Anche i metodi adottati -azioni di protesta lucide, aperte, pubblicizzate in anticipo (come quelle di distruzione di colture con

ogni)- segnano una differenza fondamentale con altre azioni a sorpresa o che, addirittura, sfiorano l'«ecoterrorismo».

Un libro stimolante, per comprendere le nuove direzioni dell'ecologia.

Giuseppe Sansoni



Krunica Hruska (curatrice)

Ecologia Urbana. Tutto ciò che occorre sapere dell'ambiente in cui viviamo.

Ed. CUEN (Via Coroglio, 156 - 80124 Napoli), 2000, p. 280, E 18,08

L'ecosistema urbano non è forse meno complesso di quelli naturali;

differisce però da questi non solo per l'ovvia presenza di edifici e strade, ma anche per la profonda modifica di molti fattori e processi: dal ciclo fisico e chimico delle acque, alle condizioni climatiche, alle proprietà dei suoli, alle dinamiche delle popolazioni animali e vegetali.

Il volume raccoglie i contributi disciplinari di vari esperti, convergenti in un approccio ecosistemico, senza trascurare quei determinanti legati alla storia, alla cultura e alla pianificazione del territorio che, nel corso del tempo, hanno conferito alle città italiane caratteristiche peculiari, diverse da altri centri urbani europei.

La prima sezione del volume, rivolta all'ambiente fisico, esamina le caratteristiche geografiche delle città italiane, il loro clima (compresi l'isola di calore, la ventilazione, l'inquinamento), le profonde alterazioni indotte dall'uso del suolo (forza motrice che interagisce con tutti i processi biotici ed abiotici), i nuovi "percorsi urbani" delle acque.

La seconda sezione affronta le principali caratteristiche della flora, della vegetazione e della fauna urbana. La penetrazione di specie dall'esterno (rupi, prati, pascoli,

boschi, cespuglieti, coltivi) e dall'interno della città (orti, siepi ornamentali, giardini, parchi), nonché i nuovi microhabitat e microclimi, rendono ragione del fatto che ben il 30% della flora italiana vive in città e testimoniano lo stretto legame tra composizione floristica e storia, civiltà, condizioni geografiche ed ecologiche.

Anche la biodiversità animale si mantiene a livelli elevati, sia pure con forti alterazioni che vanno dalla scomparsa delle specie ecologicamente più fragili all'introduzione di nuove specie e allo sviluppo demografico di altre -che diventano super-dominanti- con biomasse molte volte superiori a quelle naturali (es. passero, colombo, ratto), anche per la ricchezza di risorse trofiche, quasi illimitate.

Gli aspetti descrittivi non vanno a scapito della particolare attenzione rivolta agli aspetti gestionali, finalizzati al controllo di specie infestanti, di problemi igienico-sanitari e al miglioramento della qualità della vita. Il volume, rivolto agli studenti di scienze biologiche, naturali e ambientali, è utile anche agli operatori delle politiche ambientali urbane.

Bruno Borghini



A. Andreotti, N. Baccetti, A. Perfetti, M. Besa, P. Genovesi, V. Guberti

Mammiferi e Uccelli esotici in Italia: analisi del fenomeno, impatto sulla biodiversità e linee guida gestionali

Quad. Conservazione Natura, n. 2, Min. Ambiente - Ist. Naz. Fauna Selvatica, 2001, 189 pag.

La biodiversità, fattore indispensabile per la conservazione della natura, è da sempre sottoposta a variazioni che, in tempi medio-lunghi, hanno origine dai naturali processi evolutivi o per effetto dei cambiamenti climatici che lentamente possono interessare un'area geografica.

Nel corso dei secoli, tuttavia, sensibili mutamenti nella diversità delle comunità viventi sono avvenuti so-

prattutto per effetto dell'azione svolta dall'uomo.

Conservare la biodiversità ed accrescerne gli indici è, oggi, universalmente riconosciuto come uno dei principali obiettivi da raggiungere per contrastare i processi di banalizzazione che coinvolgono sempre di più il nostro pianeta.

Dopo la distruzione degli habitat, uno dei più importanti fattori che minano la biodiversità è forse rappresentato dall'introduzione di specie esotiche, direttamente o indirettamente causata dall'uomo.

In seguito ad introduzioni accidentali, fuga di specie in cattività, tentativi di naturalizzazione per ripopolamento, molte specie sono state introdotte in habitat dove non erano presenti; di queste, solo una minima parte è riuscita ad insediarsi stabilmente e, in alcuni casi, a divenire persino invasiva e dannosa.

Non sempre ci si è resi conto delle trasformazioni cui andavano incontro le comunità autoctone, almeno fino a quanto la nuova introduzione non ha comportato seri danni all'economia. Troppo spesso, invece, sono stati sottovalutati gli effetti che queste provocano sulla biodiversità, attraverso attività predatoria, varie forme di competizione nell'ambito della nicchia ecologica, introduzione di malattie e parassiti, ibridazione, alterazione della struttura delle biocenosi e degli habitat.

La pubblicazione di Andreotti e collaboratori offre una panoramica delle specie esotiche, che sconfinano nelle introduzioni ormai appartenenti alla storia della nostra civiltà, ed è uno strumento di lavoro utile per chi opera nel campo della conservazione della natura e della

gestione delle sue risorse.

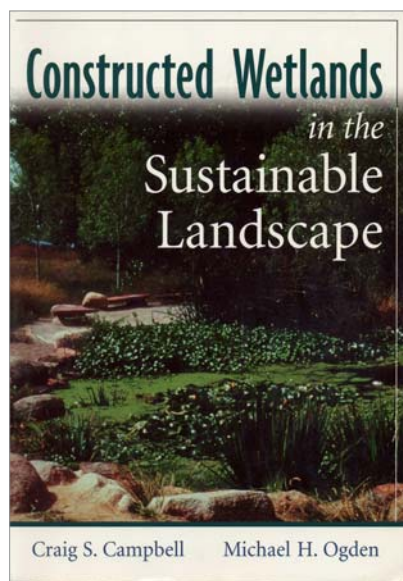
La parte introduttiva dell'opera affronta i problemi relativi alle cause più frequenti all'origine dell'introduzione delle varie specie esotiche, sottolinea gli effetti delle invasioni biologiche rispetto anche ad implicazioni di carattere socio-economico, affronta gli aspetti sanitari, si occupa della prevenzione del problema e della sua eradicazione e controllo.

Un quadro sinottico consente la rapida consultazione della situazione italiana, fornendo gli elementi essenziali per una valutazione del ruolo assunto da ciascuna specie segnalata.

Lo spazio maggiore è ovviamente dedicato alla descrizione delle singole specie. Per ognuno dei 19 mammiferi e dei 110 uccelli esotici segnalati per il territorio nazionale, vengono fornite altrettante schede nelle quali si riportano le informazioni relative alla sistematica di ciascuna specie, le caratteristiche morfologiche necessarie alla loro identificazione, le indicazioni sulla distribuzione geografica ed ecologica, lo status e l'impatto sulla biodiversità. Le schede sono di solito corredate da un inserto cartografico, per una rapida localizzazione delle aree di distribuzione sul territorio italiano.

La pubblicazione appartiene alla collana "Quaderni di Conservazione della Natura" curata dal Ministero dell'Ambiente, Servizio Conservazione della Natura, e dall'Istituto Nazionale per la Fauna Selvatica, che provvedono anche alla sua distribuzione. Può essere richiesta gratuitamente a: Istituto Nazionale per la Fauna Selvatica "Alessandro Ghigi", Via Ca' Fornacetta 9 - 40064 Ozzano Emilia BO.

Gilberto N. Baldaccini



Craig S. Campbell e Michael H. Ogden

Constructed Wetlands in the Sustainable Landscape

John Wiley & Sons, New York,
1999, 270 pp.

Per la miriade di specie animali e vegetali che ospitano, le funzioni ecologiche svolte, l'interesse scientifico, didattico e ricreativo, le zone umide –siano esse naturali o artificiali– esercitano indubbiamente un fascino particolare. Non sorprende dunque che, soprattutto da quando ne è stata riconosciuta la capacità di funzionare come ecosistema-filtro, le *zone umide costruite* hanno ricevuto un'attenzione crescente, come valida alternativa ai brutti e costosi impianti di depurazione convenzionali.

Il volume illustra l'esperienza statunitense nella realizzazione di diverse tipologie di zone umide costruite, spaziando a tutto campo sui vari aspetti coinvolti: l'elevato

livello di interazione tra diverse discipline (chimica dei suoli, biologia acquatica, biochimica microbica, idrologia, ecologia), la depurazione e la detossificazione, i vantaggi dell'approccio decentrato di trattamento dei reflui, nell'ottica dello sviluppo sostenibile.

L'elevata efficienza energetica, i bassi costi, la modesta tecnologia richiesta da questi sistemi, si affiancano ad una facile manutenzione e a possibilità di controllo superiori a quelle delle aree umide naturali. In sintesi, le zone umide sono semplici da costruire ed –essendo capaci di automantenersi e autoregolarsi– sono facili da far funzionare, un vantaggio pratico tutt'altro che trascurabile.

L'interesse particolare del volume sta nell'attenzione prestata agli aspetti progettuali, costruttivi e gestionali. Sono fornite, infatti, indicazioni dettagliate ed esaurienti sui principi e sui criteri di progettazione, basati sulla capacità idraulica, sul tempo di residenza, sulla stima del carico areale, sulla temperatura dell'acqua e sulla densità della vegetazione acquatica. La costruzione di questi particolari impianti di depurazione seminaturali viene illustrata in ogni sua fase con un ricco corredo di schemi tecnici, foto, disegni: la preparazione del substrato, la posa in opera dei vari tipi di geomembrane per la protezione delle acque sotterranee, la configurazione e i dettagli costruttivi di argini e canalizzazioni, la compartimentazione, i dispositivi di ripartizione dei flussi e di regolazione dei livelli, la manutenzione.

Particolare rilievo viene dato alle diverse tecniche di preparazione del substrato e di messa a dimora delle specie vegetali: tra le più utilizzate, la cannuccia di palude (la prima ad essere sperimentata), la tifa, scirpi e giunchi, tutte specie dotate di

tessuti aeriferi capaci di trasportare l'ossigeno dalle foglie alle radici, creando in questo modo l'ambiente favorevole per la demolizione delle sostanze organiche e l'ossidazione e precipitazione di ioni tossici.

Grazie alla continua acquisizione di dati sulle loro prestazioni in varie condizioni ambientali, oggi è più facile –anche per pianificatori e amministratori locali– considerare questi sistemi come alternative fattibili per molti progetti, soprattutto per comunità piccole e medie e laddove vi sia la disponibilità di aree a costi ragionevoli.

Sono trattati, con tanto di calcoli di dimensionamento, diversi esempi di progettazione di zone umide costruite per il trattamento di effluenti civili, per l'affinamento dello scarico di depuratori convenzionali, per applicazioni agricole, minerarie e industriali. Benché l'interesse principale sia rivolto ai sistemi di trattamento a flusso superficiale, non sono trascurati quelli a flusso subsuperficiale.

Specifici capitoli, ricchi di esempi e di configurazioni geometriche ed idrauliche, sono dedicati agli stagni di intercettazione, ritenzione e trattamento delle acque meteoriche urbane (col loro carico di inquinanti, trascinati per dilavamento) e ai sistemi di trattamento monofamiliari, veri e propri giardini lussureggianti, spesso completati da un laghetto con pesci

Non sono trascurate applicazioni combinate nelle quali, assieme alla funzione depurante, costituiscono parte integrante della progettazione il conseguimento di altri obiettivi: realizzazione di una risorsa di acqua per l'irrigazione, di habitat naturali attrattivi per l'avifauna e l'erpetofauna, di ambienti umidi capaci di vicariare quelli a suo tempo colmati o bonificati per

far posto ad usi agricoli, residenziali o industriali, ecc. A tal fine sono descritti vari accorgimenti per fornire cibo, ricovero e siti per la nidificazione degli uccelli acquatici (costruzione di zattere artificiali, piattaforme fluttuanti, impianto di idonee cinture vegetali, ecc.

L'ecologia del paesaggio fornisce al progettista un prezioso supporto per la miglior localizzazione delle zone umide sul territorio, in modo da collegarle agli habitat naturali cir-

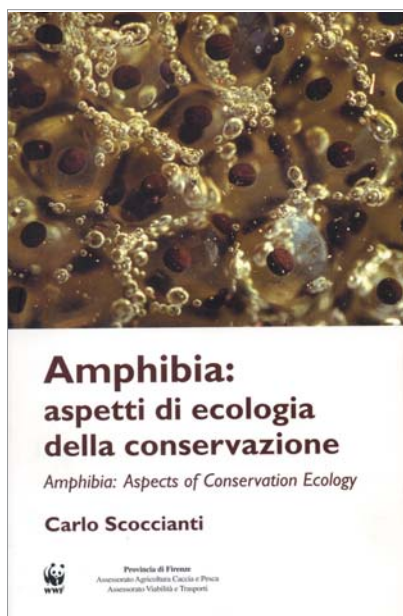
costanti e ricostruire così una rete di corridoi ecologici.

Uno degli aspetti più affascinanti della scienza e dell'arte che si sta sviluppando sulle zone umide costruite è l'abilità con la quale possono essere progettate in maniera esteticamente piacevole, in modo da essere inserite negli spazi aperti, nei parchi e nei sistemi ricreativi e integrate in un sistema di utilizzi multipli con le altre attività umane. La progettazione coinvolge così

non solo idrobiologi, ecologi o naturalisti, ma anche architetti del paesaggio, ingegneri, e artisti.

Completano la trattazione numerosi esempi dei progetti più innovativi, che incorporano design altamente artistici, valori estetici, ricreativi ed educativi. Insomma, si tratta di un volume completo, piacevole e stimolante, che difficilmente deluderà il lettore.

Silvia Carmellini



Carlo Scoccianti

AMPHIBIA: aspetti di ecologia della conservazione

Ed. WWF – Provincia di Firenze, 2001, 428 pag.

Finalmente un libro a tutto campo sul mondo degli Anfibi e, soprattutto,

to, sulle tante gravi minacce che incombono oggi sulla maggior parte delle specie di questa classe.

Il testo, pubblicato dal WWF Toscana con il contributo della Provincia di Firenze, contiene in oltre 400 pagine una mole enorme di informazioni, corredate da centinaia di citazioni bibliografiche: una vera e propria guida per gli addetti ai lavori e, allo stesso tempo, un interessante percorso per chi voglia avvicinarsi ex novo alla conoscenza delle problematiche di conservazione di queste specie.

L'Autore, sulla base di una pluriennale esperienza di studio e di iniziative di conservazione sul campo, ha voluto scrivere non una guida al riconoscimento degli Anfibi né un excursus sulla loro biologia, ma un testo che affronta in modo organico sia le numerose problematiche dell'ecologia della conservazione di queste specie sia i risultati delle soluzioni per fermare il loro declino che, come è noto, sta assumendo caratteri drammatici in tutto il pianeta.

Tutti i fattori di impatto che possono agire sugli Anfibi sono quindi approfonditamente analizzati, dal-

la scomparsa degli habitat alla loro frammentazione, dall'utilizzo di sostanze chimiche in agricoltura alle attuali pratiche silvicolture, dal prelievo da parte dell'uomo agli incendi, alle introduzioni di specie alloctone e così via, fino a fenomeni globali come l'effetto serra e l'aumento delle radiazioni UV.

Come si legge nella prefazione, questo libro è senza dubbio un aiuto indispensabile per tutti coloro che desiderano contribuire alla ricerca scientifica nel campo dell'ecologia della conservazione di queste specie.

La conoscenza dei risultati dei numerosissimi studi ed interventi concreti di conservazione discussi nel testo, infatti, sarà certamente di valido aiuto per tutti coloro che devono far fronte a questo tipo di problemi e, in particolare, si devono misurare con tutta quell'ampia serie di complesse relazioni di ecologia che si instaurano fra le specie, gli habitat e gli usi di questi da parte dell'uomo.

Paolo Resti

Libri di scienze naturali e ambientali

I volumi di seguito segnalati possono essere ordinati per posta ordinaria a *NHBS Mailorder Bookstore, 2-3 Wills Road, Totnes, Devon TQ9 5XN, United Kingdom*, oppure all'indirizzo di posta elettronica *nhbs@nhbs.co.uk*. Prima dell'ordine, controllare le condizioni più aggiornate e ulteriori informazioni sui singoli volumi sul sito <http://www.nhbs.com>.

SUSTAINABLE DEVELOPMENT

Stormwater retention basins

J-M Bergue and Y Ruperd
Balkema, Netherlands, 2000, 242 pages. Price:GBP 35.50 hardback

Watersheds. A practical handbook for healthy water

Clive Dobson and Gregor Gilpin Beck
Provides an overview of the fundamentals of ecology by showing how watersheds work, how all water systems - streams, sewers, rivers, oceans, our own plumbing - are interconnected and interdependent. Topics covered include: water and air pollution; ecological restoration; aquatic habitats; exotic species invasion; wetlands; rivers; and habitat loss.

Firefly Books, Canada, 2001, 160 pages, 100 col illus. Price:GBP 18.95 paperback

Wind energy basics. A guide to small and micro wind systems

Paul Gipe
Green Books, 1999, 122 pages, photos, illus, figs, tabs. Price:GBP 14.95 paperback

Groundwater. Past achievements and future challenges

O Sililo et al
Balkema, Netherlands, 2000, 1200 pages, 2 Volume Set. Price:GBP 90 hardback

Silenced rivers. The ecology and politics of large dams

P McCully
Entirely updated in the light of the recent World Commission on Dams Report, and responding to it, this new edition of McCully's classic study shows why large dams have become such a controversial technology in both industrialized and developing countries.
Zed Books, 2001, 416 pages. Price:GBP 15.95 paperback

Measuring environmental degrada-

tion. Developing pressure indicators for europe

Ed. by Anil Markandya and Nick Dale
Edward Elgar, 2001, c. 304 pages. Price:GBP 69.95 hardback

Virtual rivers. Lessons from the mountain rivers of the colorada front range
Ellen E Wohl

Yale UP, 2001, 216 pages, b/w illus. Price:GBP 27.50

Constructed wetlands for pollution control. Processes, performance, design and operation

IWA Specialist Group on Use of Microphytes in Water Pollution Control
2000, 159 pages, figs, tabs. Price:GBP 83 paperback

Diseases of small fruits cd-rom

APS, USA, 675+ col images. Price:GBP 88.13* CD

Diseases of vegetables CD-rom

APS, USA 525+ col images. Price:GBP 76.38* CD

Empowering the earth. Strategies for social change

Alex Begg
Begg shows how power is the fibre of society, binding us together and building our institutions. His organic theory of power - treating it as a dynamic, living process, rather than a passive tool - will facilitate strategic thinking among those working for social change. 'We are clearly dealing with power all the time, and there is a real need for this kind of theoretical work. I hope that it will be widely read.' George Monbiot.

Green Books, 2000, 288 pages. Price:GBP 10.95 paperback

Green development II. Environment and sustainability in the south

William M Adams
Revised edition of Adams's *Green Development*, last published in 1992, gives a valuable analysis of the theory

and practice of sustainable development and suggests new challenges for sustainability. It offers a synthesis of the distinctly theoretical ideas on sustainability based on the industrialised economies of the North and the practical, applied ideas in the South.

Routledge, 2001, 304 pages, 12 b/w photos, illus, 30 figs, 19 tabs. Price:GBP 18.99 paperback

Restoring the Earth. Visionary solutions from the bioneers

Kenny Ausubel
Profiles leaders of the growing movement of 'bioneers', biological pioneers who are using nature to heal nature and working with individuals, communities, businesses, and governments to implement real change.

Chelsea Green, USA, 2000, 288 pages. Price:GBP 11.95 paperback

The false dilemma - globalization: opportunity or threat

Oscar Ugarteche
A radical economic analysis of underdevelopment from a Peruvian perspective in which the author argues that the economic framework of neo-liberalism and globalization is forcing a false dilemma on the nations of the South.

Zed Books, 2000, 256 pages, tabs. Price:GBP 14.95 paperback

From the ground up. Rethinking industrial agriculture

Helena Norberg-Hodge, Peter Goering and John Page
Explores the fundamental principles which underlie the 'growth-at-any-cost' thinking of modern society and highlights some of the most promising alternative ways of producing environmentally healthy food.

Zed Books, 2nd Edition, 2001, 120 pages, figs, tabs. Price:GBP 12.95 paperback

The geopolitics of hunger, 2000-2001. Hunger and power

Action Against Hunger

Lynne Rienner, USA, 2000, 354 pages, tabs, maps. Price:GBP 23.50 paperback

The Great Gulf. Fishermen, scientists, and the struggle to revive the world's greatest fishery

David Dobbs

Discussion on the cod conflict of New England between government scientists and fishermen over how fish populations are assessed, which has led to bitter disputes and has crippled efforts to agree on catch restrictions.

Shearwater/Island Press, 2000, 256 pages, maps. Price:GBP 22.50 hardback

Hungry for trade. How the poor pay for free trade

John Madeley

As the fallout from the Seattle meeting of the World Trade Organization (WTO) continues, Madeley explores some key questions about the free trade that it advocates.

Zed Books, 2000, 192 pages, tabs. Price:GBP 9.99 paperback

Management of shared groundwater resources. The Israeli-Palestinian case with an international perspective

Ed. by Eran Feitelson and Marwan Haddad

IDRC, Canada, 2000, 280 pages. Price:GBP 23.95

Natura 2000: rural development and ecological networks.

Proceedings of international seminar held in Konstancin Poland 15-18 December 1999

Ed. by Philip Bacon

Published in Poland, 2000, 142 pages, figs, tabs. Price:GBP 13.50 paperback

Permaculture teacher's guide

Ed. by Andrew Goldring

Permanent Publications, 2000, 379 pages, b/w photos, illus, figs. Price:GBP 31.50 paperback

The sceptical environmentalist. Measuring the State of the World

Bjorn Lomborg

Lomborg challenges widely held beliefs that the environmental situation is getting worse and worse and is critical of the way in which many environmental organisations make selective and misleading use of scientific evi-

dence. He systematically examines a range of major environmental problems that feature prominently in headline news across the world and concludes that there are more reasons for optimism than pessimism, stressing the need for clear-headed prioritisation of resources to tackle real, not imagined problems.

CUP, 2001, 496 pages, 162 figs, 9 tabs. Price:GBP 16.95 paperback

Water management in Islam

Ed. by Naser I Faruqui, Asit K Biswas and Murad J Bino

UNU Press, Japan, 2000 250 pages. Price:GBP 20.50 paperback

Eliminating world poverty: making globalisation work for the poor.

White paper on international development

Department for International Development

The UK Government's second white paper on International Development, providing an outline of policy, with a focus on strategies to eliminate world poverty and cooperate with other governments and international institutions as part of a broader international effort. Clare Short has earned respect from all sides of the political arena since becoming Minister for State at DIFID, and this paper is a testament to the vigour and clarity that she has brought to a department that in the past has languished in obscurity.

Stationery Office (HMSO), 2000, 108 pages, col photos. Price:GBP 11.80 paperback

Developing naturally. A handbook for incorporating the natural environment into planning and development

Michael Oxford

ALGE, 2000, 194 pages, illus, tabs. Price:GBP 38 paperback

The Ralph Nader Reader

Ralph Nader

Landmark collection bringing Ralph Nader's writings together for the first time, creating a remarkable portrait of the activist. Includes his writings on: genetically engineered food; the World Trade Organization; Microsoft; nuclear power; women's rights; and environmental politics. 'Ralph Nader is our

indispensable voice of outrage against corporate corruption, greed, invasion of privacy, and abuse of power.' J.K. Galbraith.

Seven Stories, USA, 2000, 441 pages. Price:GBP 18.50 paperback

The end of globalization. Think regional, act local, forget global

Alan Rugman

Argues that globalization was never more than a myth and looks in detail at the managerial implications of the end of globalization, including in-depth discussion of corporate strategies, organizational structures and analytical methods.

Random House, 2001, 288 pages. Price:GBP 15.99

Marine reserves. A guide to science, design, and use

Jack Sobel and Craig Dahlgren

Provides a synthesis of information on the underlying science, as well as design and implementation issues. It describes the need for marine reserves and their potential benefits, examines how reserves can be designed to achieve specific objectives, and considers gaps in our knowledge and the research needed to address those gaps.

Island Press, USA, 2001, 220 pages, col photos, figs, tabs, maps. Price:GBP 25.95 paperback

Vital Signs 2001-2002. The trends that are shaping our future

Worldwatch Institute

Earthscan, 2001, 192 pages, figs, tabs. Price:GBP 12.95 paperback

Innovative energy strategies for CO2 stabilisation

Ed. by Robert Watts

CUP, due February 2002, 480 pages, 102 line diagrams, 3 half-tones, 36 tables. Price:GBP 45 hardback

Seeds of contention. World hunger and the global controversy over gm crops

Per Pinstrup-Andersen and E. Schioler
Reviews the basic issues and discusses the potential that GM crops have for addressing the great needs of poor and undernourished peoples throughout the world. Explains how increased agricultural productivity is not enough

in addressing the problem of famine, and that people in developing countries need crops that are disease-resistant, can fend off insect predators, and can withstand severe environmental conditions in order to produce larger crop yields.

Johns Hopkins UP, USA, 2001, 176 pages. Price:GBP 8.50 paperback

BOTANY & PLANT SCIENCE

Humic substances: versatile components of plants, soil and water

Ed. by EA Chabbour and G Davies
RSC, Special Publications 259, 2000. 341 pages, illus, figs, tabs. Price:GBP 106 hardback

The seed search. A comprehensive directory for all growers, over 43,000 seeds including 6,000 vegetables and where to buy them

Ed. by Karen Platt

A unique, UK-focused, directory of seed catalogues to enable the gardener to access the vast array of seeds available from sources around the world. 352 pages.

Seed Search / Platt, Karen, 4th Edition, 2000. Price:GBP 18.50 paperback

Tree crop ecosystems

Ed. by FT Last

Takes a holistic approach to the crops, their origins and within-species variation. Direct and indirect influences of the crops on their ecosystem are considered throughout the volume, and genetic resources of the crops as well as their pests and pathogens are also included. Ecosystems of the World 19. *Elsevier*, Netherlands, 2000, 440 pages. Price:GBP 86 hardback

Iconographia diatomologica. Annotated diatom micrographs

Ed. by H Lange-Bertalot

Iconographia Diatomologica 7.

Koeltz, Germany, 2000, 925 pages, 219 plates\4504 figures. Price:GBP 131 hardback

Susswasserflora Von Mitteleuropa: Bd 2/5: Key To Parts 1-4. Bacillariophyceae 5

Ed. by B Budel

Gustav Fischer, Germany, 2000. French and English, 311 pages. Price:GBP 62 hardback

Aquarium plants catalogue

H Windelov

With colour pictures, description and care instructions.

Verlag ACS, Germany, 2000, 85 pages. Price:GBP 7.50 paperback

Identification of common benthic diatoms in rivers

MG Kelly

Illustrated keys to the genera of diatoms found in benthic habitats in the UK are provided, along with guides to the identification of the most common species within larger genera. Field Studies Council AIDGAP Guides 9.

FSC, 2000, 116 pages, illus, figs, tabs. Price:GBP 10.95 paperback

Air pollution and plant life

Ed. by Michael Treshow and Nigel Bell

Provides a comprehensive overview of the effects of pollutants on plant life covering both the physiological and biochemical aspects and the impact at the ecological level.

Wiley, 2001, 352 pages, figs. Price:GBP 24.95 paperback

A dictionary of plant pathology

Ed. by P Holliday

Provides an essential reference for plant pathologists and agriculturalists at all levels, listing the authoritative names of all major plant pathogens and also many minor ones. The pathogens, which include fungi from over 500 genera, 800 viruses, bacteria, mollicutes, nematodes and virioids, are briefly described and supporting references given. Entries are also given for names of diseases and disorders, crops and their pathology, fungicides, taxonomic groups, terminology, toxins, vectors and past plant pathologists. In total, over 11,000 entries provide a wide-ranging resource for all those working in the discipline.

CUP, 2nd Edition, 2001, 559 pages. Price:GBP 27.95 paperback

Fungi as biocontrol agents: progress, problems and potential

Ed. by T Butt, C Jackson and N Magan
CABI, 2001, c. 350 pages. Price:GBP 55 hardback

Seeds. Ecology, biogeography, and evolution of dormancy and germination
Carol C Baskin and Jerry M Baskin

Focuses on the two most important functions of seeds - dormancy and germination.

Academic Press, 2001, 666 pages, b/w illus, figs, tabs. Price:GBP 39.95 paperback

The nature conservation value of scrub in Britain

S R Mortimer et al

JNCC Report Series 307, 2000, 191 pages. Price:GBP 15 spiralbound

The color encyclopedia of ornamental grasses on cd-rom

Rick Darke

Timber Press, Col photos, PC format only. Price:GBP 52.88 CD

Introduction to plant population biology

J Silvertown and D Charlesworth

Integrates the fields of plant population ecology, population genetics and evolutionary biology.

Blackwell Science, 4th Edition, 2001, 256 pages, 185 illus. Price:GBP 24.95 paperback

The natural garden

Francesca Greenoak

Mitchell Beazley, 2001, 160 pages, col photos, illus. Price:GBP 14.99 paperback

Plant invaders. The Threat to Natural Ecosystems

QCB Cronk and Janice L Fuller

This is a practical guide to a subject of increasing concern to the conservation biologist. Case-studies highlight specific problems from a wide range of countries. The book also contains an appendix with a list of invasive species and their countries of origin. 241 pages, b/w photos, illus, tabs, maps.

Earthscan, 2001. Price:GBP 24.95 paperback

Plants for free. How to Create a Garden for Next to Nothing

Sharon Amos

Shows how to develop a natural garden without spending a fortune, including where to get the best bargains in young healthy plants. Contains a plant directory with illustrations and comprehensive information on characteristics, and includes over 100 ornamentals and herbs that can be propa-

gated with no trouble at all.

Collins & Brown, 2001, 144 pages, 200 col photos. Price:GBP 14.99 paperback

Biomonitoring: general and applied aspects on regional and global scales

Ed. by Conradin A Burga and Anselm Kratochwil

Includes case studies of applied biomonitoring in Germany, Switzerland and Svalbard. Tasks for Vegetation Science 35.

Kluwer, Netherlands, 2000. 248 pages. Price:GBP 79 hardback

Botanica. The illustrated A-Z of over 10,000 garden plants and how to cultivate them

Gordon Cheers

Comprehensive and authoritative reference to plants. 1020 pages, col photos.

Periplus, Singapore, 2000, Price:GBP 65 hardback

Cultivated palms of the world

Don/Ellison, Anthony Ellison

Comprehensive photographic reference describing 840 of the most common palm species and cultivars from around the world, and containing nearly 1300 photographs. For each palm described, it shows a photo of a specimen and in many cases inset photos of fruit, trunks or other distinguishing features, as well as information on the region/country of origin, size, growth habits, growing conditions and fruit and seeds.

Briza, South Africa, 2000, 264 pages, 1245 col photos. Price:GBP 82 hardback

Vegetation ecology

Ed. by E van der Maarel

An international team of contributors discuss plant ecology at the community, landscape and global level, covering areas such as the effects of climate change on the movement of vegetation boundaries.

Blackwell Science, 2001, 256 pages, 170 illus. Price:GBP 27.50 paperback

Gaia organic basics: pests

Charlie Ryrie

An easy-to-use guide to garden pests and natural ways to control them.

Gaia Books, 2001, 62 pages, col photos. Price:GBP 5.99 paperback

Gaia organic basics: weeds

Charlie Ryrie

How to control weeds in your garden without resorting to chemicals.

Gaia Books, 2001, 62 pages, col photos. Price:GBP 5.99 paperback

Wetland plants: biology and ecology

J Cronk

Presents a synthesis of studies and reviews from biology, plant physiology, evolution, genetics, community and population ecology, and environmental science and engineering.

CRC Press, USA, 2001, 412 pages, b/w photos, illus, figs, tabs. Price:GBP 70 hardback

Protocols in lichenology. Culturing, Biochemistry, Ecophysiology and Use in Biomonitoring

Ed. by I Kranner, R Beckett and A Varma

Springer, 2001, 580 pages, 88 Figs, 4 col figs. Price:GBP 51 paperback

Diatoms of Europe, volume 2: *Navicula* sensu stricto, 10 genera separated from *navicula sensu lato*, frustulia

Ed. by Horst Lange-Bertalot

Cramer, Germany, 2001, 526 pages, b/w plates. Price:GBP 169 hardback

The forgiveness of nature. The Story of Grass

Graham Harvey

Explores the world of grass from every possible perspective, revealing - as if for the first time - the astonishing universe that lies beneath our feet.

Jonathan Cape, 2001, 352 pages. Price:GBP 15.99 paperback

The freshwater algal flora of the British isles. An identification guide to freshwater and terrestrial algae

DM John, AJ Brook and BA Whitton

Comprehensive identification guide covering more than 2200 species (excluding diatoms), the majority of which also have a world-wide distribution. Non-technical descriptions are supported by clear line illustrations or photographs that emphasise the features significant for identification, most of which can be seen with a simple light microscope. An accompanying CD-ROM provides a further colour photocatalogue of 1000 images of algae and algal habitats.

CUP, 2001, 720 pages, 11 b/w photos, 150 line illus. Price:GBP 75 hardback

CONSERVATION & BIODIVERSITY

Cultural and spiritual values of biodiversity. **A complementary contribution to the global biodiversity assessment**

UNEP

Highlights the central importance of cultural and spiritual values in the appreciation and preservation of all life and argues that these values give us a true reflection of worth. It demonstrates how many cultures see Nature as an extension of society, and how sensitive stewardship is an integral part of existence.

UNEP, Switzerland, 2000, 750 pages. Price:GBP 42.50 paperback

Across the Great Divide. Explorations in collaborative conservation and the American west

Ed. by Philip Brick

Discusses 'collaborative conservation', a new conservation movement that focuses on voluntary compliance and consent rather than legal and regulatory enforcement, bringing together writing, reporting, and analysis from those directly involved in developing and implementing the approach.

Island Press, USA 2000 256 pages, illus, maps. Price:GBP 22.50 paperback

Conservation biology. Research priorities for the next decade

Ed. by Michael Soule and Gordon H Orians

In 1989, the Society for Conservation Biology and Island Press produced Research Priorities for Conservation Biology, a slim volume that set forth the findings of experts who had gathered to outline research needs for the near future, and which served as a guidepost for the field throughout the 1990s. In January 2000, leaders of the Society for Conservation Biology convened a similar group to reach consensus on where the field now stands and to determine the major, compelling research priorities for the next decade. Conservation Biology: Research Priorities for the Next Decade presents the results of that gathering, notes progress or changes in the state of global biodiversity over the past decade and discusses overarching

themes that influence all areas of conservation; offers ten chapters by leading experts that summarize the status of knowledge in key areas ranging from marine conservation to ecological restoration to conservation medicine; sets forth research priorities for each area; and describes gaps in current knowledge that are impeding the ability of conservation practitioners to carry out their work.

Island Press, USA, 2001, 258 pages, photos, figs, tabs. Price:GBP 22.50 paperback

Designing field studies for biodiversity conservation

Peter Feinsinger

Comprehensive and practical guide to using scientific inquiry in conservation work, focusing on the fundamentals of common sense, independent thinking, and natural history. Topics covered include: framing the question and designing the study; interpreting and applying results through judicious use of statistical inference; taking into account the natural history of plants, animals, and landscapes; monitoring and assessing progress through approaches such as "bioindicator species" or "species diversity measures"; and helping other interested parties (park guards, local communities, school teachers) use scientific inquiry in addressing their own concerns.

Island Press, USA, 2001, 219 pages, photos, figs, tabs. Price:GBP 24.50 paperback

Nature out of place. Biological invasions in the global age

J Van Driesche and R Van Driesche

Though the forests are still green and the lakes full of water, an unending stream of invasions is changing many ecosystems around the world from productive, tightly integrated webs of native species to loose assemblages of stressed native species and aggressive invaders. This volume brings this devastating but overlooked crisis to the forefront of public consciousness by offering a fascinating exploration of its causes and consequences, along with a thoughtful and practical consideration of what can be done about it.

Island Press, USA, 2000, 352 pages, photos, tabs, maps. Price:GBP 26.95 hardback

The origins of nature conservation in Italy

James Sievert

Documents the rise, fall, and recovery of nature conservation in Italy, the environmental degradation of Italy's wetlands, mountains, and forests due to unification, industrialization, to the rush towards modernization. Also covers the ups and downs of Italy's conservation movement in the 1900's.

Peter Lang, Switzerland, 2000, 298 pages, illus. Price:GBP 46.50 paperback

Restoring nature. Perspectives from the social sciences and humanities

Ed. by Paul H Gobster and Bruce Hull
Island Press, USA 2001 269 pages, illus, tabs. Price:GBP 22.50 paperback

The unified neutral theory of biodiversity and biogeography

Stephen P Hubbell

In many ways Hubbell's theory is the ecological analog to the neutral theory of genetic drift in genetics. The unified neutral theory of biogeography and biodiversity should stimulate research in new theoretical and empirical directions by ecologists, evolutionary biologists, and biogeographers. 'This provocative and enlightening work, deeply original and supported by some of the most extensive field research ever conducted in biology, will be regarded as one of the most important contributions to ecology and biogeography of the past half century.' Edward O. Wilson, author of *Biodiversity*.

Princeton UP, USA, 2001, 448 pages, 123 line illus. Price:GBP 19.95 paperback

Wild solutions. How biodiversity is money in the bank

Andrew Beattie and Paul R Ehrlich

Describes the millions of species that provide ecosystem services to maintain the quality of air and water and the fertility of the soil, dispose of domestic, industrial and agricultural waste, and protect crops from pests. Also describes how biological diversity opens the way for new medicines, pharmaceuticals, construction materials and designs, and manufactured goods.

Yale UP, 2001, 272 pages, 40 illus. Price:GBP 19.95. paperback

Conservation in production environments: managing the matrix

Ed. by JL Craig, N Mitchell and DA Saunders

Surrey Beatty, Australia, 2001, 720 pages, col illus, half-tones, diagrams, tabs. Price:GBP 108 hardback

Action for wildlife. The Dartmoor biodiversity action plan

Dartmoor National Park Authority

Excellent action plan for Dartmoor, with much useful data on distribution and occurrence, together with clearly formulated plans for faunal and floral groups and individual species.

2001, 200 pages, b\w photos, tabs [A4 format]. Price:GBP 15.50 paperback

The great reshuffling. Human dimensions of invasive alien species

Ed. by JEFFREY A McNEELY

Proceedings of a workshop on the Global Invasive Species Programme (GISP) held in Cape Town, South Africa, 15-17 September 2000.

IUCN, 2001, 242 pages, figs. Price:GBP 14 paperback

The functional consequences of biodiversity. Empirical progress and theoretical extensions

Ed. by Ann P Kinzig, Stephen Pacala and G David Tilman

Synthesises empirical studies on the relationship between biodiversity and ecosystem functioning and extends that knowledge using a novel and coordinated set of models and theoretical approaches. Also contains a blueprint for moving beyond small-scale studies to regional ones - a move of enormous significance for policy and conservation but one that will entail tackling some of the most fundamental challenges in ecology. *Monographs in Population Biology*.

Princeton UP, USA, due January 2002, 368 pages, 55 line illus, 12 tabs. Price:GBP 19.95 paperback

Marine conservation science and policy

GC Ray and M McCormick-Ray

Describes current approaches and mechanisms for the conservation of coastal and marine ecosystems, as employed by nations of the North Atlantic for their shared resources and viewpoints. Also covers future issues that

can be incorporated into the development of management practices that can lead to sustainable ecosystems and resource uses.

Blackwell Science, due January, 2002, 288 pages, 90 illus. Price:GBP 29.50 paperback

Predicting species occurrences. Issues of accuracy and scale

J Michael Scott, Patricia J Heglund and Michael L Morrison

Predictions about where different species are, where they are not, and how they move across a landscape or respond to human activities - if timber is harvested, for instance, or stream flow altered - are important aspects of the work of wildlife biologists, land managers, and the agencies and policymakers that govern natural resources. Despite the increased use and importance of model predictions, these predictions are seldom tested and have unknown levels of accuracy. *Predicting Species Occurrences* addresses those concerns, highlighting for managers and researchers the strengths and weaknesses of current approaches, as well as the magnitude of the research required to improve or test predictions of currently used models.

Island Press, USA, 2001, 840 pages, tabs. Price:GBP 90 hardback

Protecting biodiversity. Roles and responsibilities

Ed. by Catherine Potvin, Margaret Kraenzel and Gilles Seutin

Intriguing dialogue about the place of humans in nature where the authors asked scientists from developing countries to summarise their experiences of international collaboration and to suggest attitudes and practices that would lead to more fruitful exchanges with northern scientists.

McGill-Queens UP, Canada 2001 160 pages. Price:GBP 20.95 paperback

Biodiversity in the balance. Land use, national development and global welfare

Raffaello Cervigni

'No-one combines the practical experience with analytical expertise in biodiversity conservation better than Raffaello Cervigni. He has worked at so many levels on this problem - local, national and global. This volume dem-

onstrates the manner in which real world experience can inform the better understanding of biodiversity problem solving. I consider it essential reading for all academics and policymakers interested in the economic nature of the solution to this problem.' Timothy M. Swanson University College, London.

Edward Elgar, 2001, 240 pages. Price:GBP 55 hardback

Conservation biology

Andrew S Pullin

Illustrated textbook introducing students to conservation biology. The fundamental problems of habitat loss and fragmentation, habitat disturbance and the non-sustainable exploitation of species in both aquatic and terrestrial ecosystems are explored. Methods that have been developed to address these problems, from the most traditional forms of conservation, to new approaches at genetic to landscape scales are then discussed, showing how the science can be put into practice.

CUP, due March 2002, 300 pages, 119 line diagrams, 15 tables, 41 graphs, 145 figures, 46 maps. Price:GBP 27.95 paperback

For the health of the land. Previously unpublished essays and other writings Aldo Leopold

The book offers a series of forty short pieces, arranged in seasonal "almanac" form, along with longer essays, arranged chronologically, which show the development of Leopold's approach to managing private lands for conservation ends. The writings are vintage Leopold - clear, sensible and provocative, sometimes humorous, often lyrical, and always inspiring.

Shearwater, USA, 2001, 243 pages, illus. Price:GBP 12.95 paperback

Return of the wild. The future of our natural lands

Ed. by Ted Kerasote

Brings together leading thinkers and writers to examine why nature in its most untrammelled state is vitally important to all of us; what currently threatens wild country; and what can be done not merely to conserve more of it, but also to return it to our lives and consciousness. Contributors consider a wide range of topics relating to wild-

lands, and explore the varied economic, spiritual, and ecological justifications for preserving wilderness areas. *Island Press*, USA, 2001, 240 pages, col photos, tabs, maps. Price:GBP 14.50 paperback

The western paradox. A conservation reader

Bernard DeVoto

Brings together ten of DeVoto's harsh and still timely essays on Western US conservation issues, along with his unfinished conservationist manifesto, *Western Paradox*, which has never before been published.

Yale UP, 2001, 576 pages. Price:GBP 12.99 paperback

ECOLOGY

The poverty of the linnaean hierarchy. A Philosophical Study of Biological Taxonomy

Marc Ereshefsky

Addresses the question of whether biologists should continue using the Linnaean hierarchy to classify organisms. Ereshefsky argues that biologists should abandon the Linnaean system and adopt an alternative that is more in line with evolutionary theory and more able to provide accurate biological classifications. He then moves on to make specific recommendations for a post-Linnaean method of classification.

CUP 328 pages, 21 line illus. Price:GBP 40 hardback

Ecology. The experimental analysis of distribution and abundance

Charles J Krebs

A classic work, which is a must for professional ecologists. It emphasises the role of experiments in testing ecological ideas and discusses many contemporary and controversial problems related to distribution and abundance. Throughout the text, Krebs thoroughly explains the application of mathematical concepts in ecology while reinforcing these concepts with research references, examples, and interesting end-of-chapter review questions.

Addison Wesley Longman, 5th Edition, 2001, 816 pages, col and b/w figs, tabs. Price:GBP 32.99 hardback

Ecology and field biology

Robert L Smith and Thomas M Smith
Presents a comprehensive review of all aspects of ecology, including evolution, ecosystems theory, practical applications, plants, animals, biogeochemical cycles, and global change.
Addison Wesley Longman, 6th Edition, 2000, 686 pages, col photos, col & b/w illus, figs, tabs, maps. Price:GBP 32.99 hardback

The architecture of the pan european ecological network. Suggestions for concept and criteria

AJFM Van Opstal

NRC for Nature Management, Netherlands, Rapport IKC Natuurbeheer 37, 2nd Edition, 2000, 100 pages, b/w photos, illus, figs, tabs, maps. Price: GBP 26.95 paperback

Biodiversity dynamics. Turnover of populations, taxa, and communities
Ed. by Michael L McKinney and James A Drake

Where paleontologists and ecologists have long had divergent perspectives, this book seeks a middle ground, finding ways for both scientific communities to work together to comprehend biodiversity. 'Stakes out a new territory of disciplinary practice.' Ecology
Columbia UP, USA, 2001, 552 pages, figs. Price:GBP 19 paperback

Ecology and design. Frameworks for learning

Ed. by Bart Johnson and Kristina Hill
Examines the need for change in the education and practice of landscape architecture and in the physical planning and design professions as a whole and offers recommendations for the integration of ecology within a landscape architecture curriculum, as an example for other design fields such as civil engineering and architecture.
Island Press, USA, 2001, 448 pages, photos, figs, tabs. Price:GBP 28.95 paperback

The economy of nature

Robert E Rickleffs

New and revised edition of this popular text, offering a broad and balanced view of all the major aspects of ecology, from the ecosystem and evolution to population and community.
WH Freeman, 5th Edition, 2001, 700 pages, 550 illus, charts, graphs, col

photos. Price:GBP 29.95 paperback

Stability and complexity in model ecosystems

Robert M May

What makes populations stabilize? What makes them fluctuate? Are populations in complex ecosystems more stable than populations in simple ecosystems? In 1973, Robert May addressed these questions in this classic book. May investigated the mathematical roots of population dynamics and argued counter to most current biological thinking that complex ecosystems in themselves do not lead to population stability. Stability and Complexity in Model Ecosystems played a key role in introducing nonlinear mathematical models and the study of deterministic chaos into ecology, a role chronicled in James Gleick's book *Chaos*. In the quarter century since its first publication, the book's message has grown in power. Nonlinear models are now at the center of ecological thinking, and current threats to biodiversity have made questions about the role of ecosystem complexity more crucial than ever. In a new introduction, the author addresses some of the changes that have swept biology and the biological world since the book's first publication.

'May's Stability and Complexity in Model Ecosystems was undoubtedly the most influential treatise in theoretical ecology since the pioneering efforts of Volterra and Lotka. It transformed the subject by brokering a marriage between theory and fact that had been and is still too often-missing in theoretical ecology. It is no coincidence that the full integration of theory into ecology has occurred since the original appearance of this landmark book. May's new introduction wonderfully places events in perspective.' Simon Levin, Princeton, University Monographs in Population Biology 6.

Princeton UP, USA, 2001, 292 pages, figs. Price:GBP 12.95 paperback

The theory of island biogeography

R MacArthur and EO Wilson

Biogeography was stuck in a "natural history phase" dominated by the collection of data, the young Princeton biologists Robert H. MacArthur and Edward O. Wilson argued in 1967. In

this book, the authors developed a general theory to explain the facts of island biogeography. The theory builds on the first principles of population ecology and genetics to explain how distance and area combine to regulate the balance between immigration and extinction in island populations. The authors then test the theory against data. The Theory of Island Biogeography was never intended as the last word on the subject. Instead, MacArthur and Wilson sought to stimulate new forms of theoretical and empirical studies, which will lead in turn to a stronger general theory. Even a third of a century since its publication, the book continues to serve that purpose well. From popular books like David Quammen's *Song of the Dodo* to arguments in the professional literature, The Theory of Island Biogeography remains at the center of discussions about the geographic distribution of species. In a new preface, Edward O. Wilson reviews the origins and consequences of this classic book.

'MacArthur and Wilson's is arguably the most influential book in biogeography in the last hundred years. With its emphasis on on-going processes of colonization and extinction, it provided a new framework to explain patterns in species diversity and served as a counterpoint to hypotheses relying on chance and solitary historical events. Many of the antecedents for what we now call conservation biology, invasion biology, and landscape ecology had their origins here.' Ted Case, University of California, San Diego Monographs in Population Biology 1.

Princeton UP, USA, 2nd Edition, 2001, 224 pages, figs, tabs. Price:GBP 12.95 paperback

Design and analysis of ecological experiments

Ed. by Samuel M Scheiner and Jessica Gurevitch

OUP, USA, 2nd Edition, 2001, 415 pages, figs, tabs. Price:GBP 24.95 paperback

A handbook of industrial ecology

Ed. by Robert U Ayres and Leslie W Ayres

Edward Elgar, 2001, 750 pages. Price: GBP 190 hardback

Landscape ecology in theory and practice. Pattern and process

M Turner, R Gardner and R O'Niell
Provides a broad overview of landscape ecology, including its development, the methods and techniques that are employed, the major questions addressed, and the insights that have been gained.
Springer, 2001, 401 pages, figs, tabs.
Price: GBP 47.50 paperback and CD set

Ecological assembly rules. Perspectives, advances, retreats

Ed. by Evan Weiher and Paul Keddy
Brings together contributions which examine the question of the existence and nature of assembly rules with rigour and in some detail, using both theoretical and empirical approaches in a variety of systems. Encompasses a wide range of topics within ecology such as competition and coexistence, conservation and biodiversity, niche theory, and biogeography.
CUP, 2001, 418 pages, Figs, tabs.
Price: GBP 27.95 paperback

The silver lining. The benefits of natural disasters

Seth R Reice
'Seth Reice melds his own, original work on non-equilibrium ecology with a good basic introduction to community ecology and current, very important issues in conservation ecology/biodiversity. The book is highly accessible, and the chapters on fire and floods are brilliant.' Niles Eldredge, American Museum of Natural History.
Princeton UP, USA 2001 240 pages, 15 line illus, 3 tabs. Price: GBP 17.95 hardback

The ghosts of evolution. Nonsensical fruit, missing partners and other ecological anachronisms

Connie Barlow
Explores one of the hottest new ideas in ecological theory, that the dense web of dependencies which makes up an ecosystem contains an overlooked factor - time. Most organisms are adapted for relationships with other organisms, or 'missing partners', that are now extinct. Barlow suggests that current ripples of biodiversity loss may thus turn into cascades of extinction.
Basic Books, USA, 2001, 291 pages, b/w photos, illus. Price: GBP 21.50 hardback

Monitoring ecological impacts. Concepts and practice in flowing waters

Barbara J Downes, Leon A Barmuta, Peter G Fairweather and Daniel P Faith
Provides the tools needed to design assessment programs that can reliably monitor, detect and allow management of human impacts on the natural environment. Step-by-step guidelines and flow diagrams provide useable protocols, which can be applied in any region of the world and to a wide range of human impacts. In addition, case studies are used to show how the theory can be put into practice.
CUP, due January 2002, 420 pages, 37 line illus, 36 tabs. Price: GBP 60 hardback

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Frank Taylor, Mike Cartwright and Rafi Ahmad
Provides comprehensive coverage of all the major, broadly applicable methods, from traditional methods to biosensors and remote sensing, giving practical guidance on their use.
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Environmental restoration. Ethics, theory and practice

Ed. by William Throop
Prometheus, USA, 2000, 240 pages, tabs. Price: GBP 19.50 paperback

The satanic gases: clearing the air about global warming

P/Balling, RC Michaels
Global warming is vastly overrated as an environmental threat, argue leading climatologists Patrick J. Michaels and Robert Balling, Jr. The Satanic Gases presents an impressive array of scientific data, studies, and analyses that argue, cogently and consistently, that the initial forecasts of rapid global warming were simply wrong. But, perhaps more important, the book suggests that attempts to "fix" the forecast by the UN's Intergovernmental Panel on Climate Change are even more misguided than the original projections.
Cato, 2000, 234 pages, figs, tabs, maps. Price: GBP 7.99 paperback

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sets and the future of capitalism

Peter Barnes
Debate about the costs and benefits of addressing climate change. proposing a market-based institution called a Sky Trust that would set limits on carbon emissions. The Trust would be funded by requiring polluters to pay for the right to emit carbon dioxide, and managed by a non-governmental agency.
Island Press, USA, 2001, 208 pages, photos, figs, tabs. Price: GBP 20.95 hardback

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B McGuire
Cassell, 1999, 256 pages, illus, figs, tabs, maps. Price: GBP 14.99 paperback

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Louise Bull and Mike Kirkby
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Environmental toxicology

David A Wright and Pamela Welbourn
Introductory textbook dealing with many aspects of the subject, from the molecular to the ecosystem level.
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OECD environmental outlook

OECD
Provides economy based projections of environmental pressures and changes in the state of the environment to 2020. Drawing on an analysis of the economics, social and technological forces driving environmental change, this report provides projections to 2020 of environmental pressures from key economic sectors (agriculture, forestry, fishery, transport, energy and selected industry sectors) and changes in the state of the environment for selected environmental issues (freshwater, biodiversity, climate change, air quality and waste).
OECD, France, 2001, 327 pages, figs, tabs. Price: GBP 64 paperback

Encyclopedia of global change. Environmental change and human society

Ed. by Andrew S Goudie and David J Cuff

A comprehensive, interdisciplinary reference source on the natural and human-made changes in the earth's physical, biological, and chemical systems. The 300 original articles and many illustrations present the full range of interactions between technological, political, and economic forces and the state of the planet.

OUP, 2001, 1440 pages, 33 b/w illus, 300 figs, 95 maps. Price: GBP 185 hardback

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Michael C Newman

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Suthan S Sutherson

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Marc D Hauser

Hauser, an acclaimed scientist in the field of animal cognition, uses insights

from evolutionary theory and cognitive science to examine animal thought, treating animals neither as machines devoid of feeling nor as extensions of humans, but as independent beings driven by their own complex impulses.
Henry Holt, USA, 2000, 315 pages, illus. Price: GBP 21.50 hardback

Animal minds. Beyond cognition to consciousness

Donald R Griffin

In this newly revised edition of this classic text, Griffin moves beyond animal cognition to argue that scientists can and should investigate questions of animal consciousness. Using examples from studies of species ranging from chimpanzees and dolphins to birds and honeybees, he demonstrates how communication among animals can serve as a window into what animals think and feel. Griffin also reviews the latest research in cognitive neuroscience, and considers the latest scientific research on animal consciousness and explores its profound philosophical and ethical implications.

Chicago UP, USA, 2001, 2nd Edition, 376 pages. Price: GBP 17.50 hardback

Chance in biology. Using probability to explore nature

Mark Denny and Steven Gaines

'This is a thoroughly delightful and scholarly tour through the theory and application of probability and statistics in biology. The reader will learn much about the fundamentals of stochastic processes, as well as much about the biology itself. The best of mathematical biology.' - Simon Levin, Princeton University

Princeton UP, USA, 2001, 424 pages, 4 b/w illus, 81 illus, 7 tables. Price: GBP 25 hardback

Parasite rex: inside the bizarre world of nature's most dangerous creatures

C Zimmer

'As Zimmer shows, parasites are the real drivers of evolution: we live at best only arm's length from the unseen creatures that control our lives. Zimmer loves his subject, and his treatment is gentle rather than sensational: the understatement only heightens the horror. Read Parasite Rex and shudder - your dinner party conversations will never be the same again.' Henry

Gee, Senior Editor at Nature and author of In Search of Deep Time

Free Press, USA, 2000, 298 pages, b/w photos, figs. Price: GBP 20.95 hardback

Sensory exotica. A world beyond human experience

Howard C Hughes

The book is divided into four parts: biosonar, biological compasses, electroprecognition, and chemical communication. Although it is filled with fascinating descriptions of animal sensitivities - the sonar system of the bat, for example, rivals that of the most sophisticated human-made devices - the author's goal is to explain the anatomical and physiological principles that underlie them.

MIT Press, 2001, 345 pages, 124 illus. Price: GBP 11.50 paperback

Official lists and indexes of names and works in zoology

Melville and Smith

Provides details on all the names and works on which the Commission had ruled and placed on the Official lists and Indexes since it was set up in 1895 through to the end of 1985. Contains 9917 entries, 9783 being family group, generic or specific names and 134 relating to works.

ITZN, 2nd Edition, 2001, 366 pages. Price: GBP 75 hardback

Official list and indexes of names and works in zoology. Supplement 1986-2000

Edited by JDD Smith

Presents an additional 601 opinions and directions as published between 1986 and 2000 in the Bulletin of Zoological Nomenclature listing 2371 names and 14 works placed on the Official Lists and Indexes.

ITZN, 2001, 136 pages. Price: GBP 100 hardback

Ecology of wildlife diseases

Peter Hudson, Annapaola Rizzoli, Bryan Grenfell and Hans Heesterbeek

The study of epidemiology is an essential part of understanding how infectious diseases emerge, and how they affect humans, wildlife and wildlife conservation. The integration of modelling techniques with parasitology and population dynamics has been hugely significant for our understanding of

disease dynamics. This book on wild-life epidemiology brings the subject right up to date, covering the most recent empirical and theoretical developments in the field.

OUP, 2001, 240 pages, line illus. Price:GBP 24.95 paperback

Yeasts of the world

T Boekhout et al

World Biodiversity Database.

Springer, 2001. Price:GBP 86.66 CD (Windows)

Marine microbiology. Methods in microbiology

Edited by John Paul

Academic Press, 2001, 666 pages, illus, figs, tabs. Price:GBP 39.95 spiralbound

Algal adaptation to environmental stress. Physical, biochemical and molecular mechanisms

Edited by LC Rai and JP Gaur

Springer, 2001, 421 pages, 67 figs, 23 tabs. Price:GBP 132 hardback

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Michael F Land

Provides a comprehensive account of all known types of eye, and covers the way they work, from optics to behaviour.

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Christopher Boehm

Are humans by nature hierarchical or egalitarian? By examining the evolutionary origins of social and political behaviour, the author, an anthropologist whose fieldwork has focused on the political arrangements of human and non human primate groups, postulates that egalitarianism is in effect a hierarchy in which the weak combine forces to dominate the strong.

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Longevity records: life spans of mammals, birds, amphibians, reptiles and fish

J Carey and DS Judge

Odense Monographs on Population and Aging Series 8.

Odense UP, Denmark, 2000, 241 pag-

es. Price:GBP 28.50 hardback

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Cultural landscapes and environmental change

Lesley Head

Attempts to bridge the gap between the sciences and the humanities by reviewing the most important methodological and conceptual tools that help environmental scientists understand cultural landscapes. Key Issues in Environmental Change.

Arnold, 2000, 179 pages, b/w photos, figs, tabs, maps. Price:GBP 16.99 paperback

The green book of language revitalization in practice. Toward sustainable development

L Hinton and K Hale

Academic Press, 2001, 450 pages. Price:GBP 26.95 paperback

The book of life. An illustrated history of the evolution of life on earth

Ed. by Stephen Jay Gould, Peter Andrews, John Barber, Jean-Paul Tibbles and M Benton

This great book is at once a readable introduction to paleobiology, the fossil record and evolutionary theory (with contributions from Michael Benton, Christine Janis, Peter Andrews, Christopher Stringer and others) and a unique illustrated survey (with hundreds of paintings, drawings, charts and graphs) of the history of life on earth. The authors take us (in chronological sequence) from the emergence of bacteria 4 billion years ago to the evolution of homo sapiens in recent geological time. Highly recommended - there are no other books quite like this one.

Norton, USA, 2nd Edition, 2001, 256 pages, col photos. Price:GBP 33.50 hardback

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Henry Gee

Rather than looking to fossils to tell us limited stories of ascent and descent, cause and effect, Henry Gee shows us that by using the technique of cladistics the story of evolution is at last freed from the limitations of human imagination. This timely text offers a

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Fourth Estate, 2001, 272 pages, 13 b/w illus. Price:GBP 7.99 paperback

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Ed. by T Matsuzawa

Aims to illuminate the primate origin of human cognition and behaviour through field observation and environmental analysis.

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Ed. by Ronald Noe, Jan A R A M Van Hoof and Peter Hammerstein

Combines insights from economics, evolutionary biology and the social sciences to look at comparative aspects of economic behaviour in humans and other animals.

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Dawkins vs. Gould. Survival of the fittest

Kim Sterenly

Sterenly moves beyond caricature to expose the real differences between the conceptions of evolution of these two leading scientists. He shows that the conflict extends beyond evolution to their very beliefs in science itself; and, in Gould's case, to domains in which science plays no role at all. *Icon Books*, 2001, 161 pages. Price:GBP 5.99 paperback

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OUP, 2001, 396 pages, 16 b/w plates. Price:GBP 8.99 paperback

Human frontiers, environments and disease. Past patterns, uncertain futures

Tony McMichael

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Biodiversity and environmental impact assessment: a good practice guide for road schemes

Helen Byron

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Springer, 2000, 580 pages, 217 figs, 72 tabs. Price:GBP 103 hardback

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M Pansu, J Gaytheyrou and J-Y Loyer *Balkema*, Netherlands, 2000, 500 pages. Price:GBP 62 hardback

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Combines a discussion of the ecology of streams and rivers with an illustrative field guide of the plants and animals found in the running waters of

North America. Although this book uses North American examples, much of the ecological processes, interactions and classifications are covered are applicable to running waters worldwide. *Academic Press*, 2000, 360 pages. Price:GBP 32.95 paperback

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Ed. by SR Harrison, JL Herbohn and KC Herbohn

Edward Elgar, 2000, 272 pages. Price:GBP 59.95 hardback

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Cornelia Dean

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Columbia UP, USA, 2001, 336 pages, 27 photos. Price:GBP 11.95 paperback

Ecosystems management: lessons from around the world. A guide for development and conservation practitioners

Ed. by Jean Yves Pirot, Peter John Meynell and Danny Elder

Commissioned by the World Bank Environment Department and prepared by IUCN - The World Conservation Union, this guide was produced to enable natural resource managers to benefit from the lessons learned by other development practitioners and conservation organizations.

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Ed. by Dave Egan and Evelyn Howell

Makes essential connections between past and future ecosystems, bringing together leading experts to offer a much-needed introduction to the field

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Ed. by Christopher J Huggard and Arthur R Gomez

Arizona UP, USA, 2001, 350 pages, illus. Price:GBP 39.50 hardback

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Forestry Commission

Forestry Commission, 3rd Edition, 2000, 36 pages, illus. Price:GBP 8.95 paperback

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P Williams et al

Excellent manual. Contents include: History of Ponds; Pond Assessment and Management; Planting and Managing Plants for Ponds; Managing Water Depths and Levels; and Making New Ponds.

Oxford Brookes Pond Action, 2001, 105 pages, illus, tabs. Price:GBP 17.50 Reprinting paperback

Restoring and managing riparian woodlands

John Parrott and Neil MacKenzie

Explores the ecological relationship between native riparian woodland and fresh water, providing guidance on the management and restoration of these woodlands.

Scottish Native Woods, 2000, 36 pages, col photos, illus, tabs. Price:GBP 6.95 paperback

Demonstration of reedbed filtration systems at WWT Slimbridge and WWT Martin Mere

Matthew Millett

WWT, 1997, 120 pages, figs, tabs. Price:GBP 26.95 spiralbound

Habitat management for invertebrates: a practical handbook

P Kirby

Welcome reprint of this invaluable handbook, produced jointly by RSPB and the Joint Nature Conservation Committee. Many invertebrates are highly specialised creatures with very precise habitat requirements. This means that they can be very sensitive indicators of environmental change. It also means that they can be lost from a site through small changes in management of their habitat. This book is the first practical manual covering management for invertebrates: it provides guidelines to enable reserve manag-

ers to take account of the vulnerable habitat features so important to invertebrates. After a long delay, due to be reprinted in April/May 2001. Price given is provisional.

RSPB, 2001, 150 pages, b/w photos, line illus. Price:GBP 12.50 Reprinting - paperback

The pilot analysis of global ecosystems: agroecosystems

Stanley Wood, Kate Sebastian, Sara Scherr and IFPR

Quantitatively and qualitatively assesses the condition of agroecosystems in terms of the delivery of a number of key goods and services valued by society. Also deals with soil resource condition, both as a determinant of agroecosystem capacity to produce goods and services and as a consequence of agroecosystem management practices. It reveals that environmental damage threatens future world food production. Pilot Analysis of Global Ecosystems.

WRI, USA, 2000, 100 pages. Price:GBP 16.95 paperback

The pilot analysis of global ecosystems: forest ecosystems

Emily Matthews, Richard Payne, Mark Rohweder and Siobhan Murray

Analyzes datasets at the global, national, and subnational levels, and draws on published and unpublished scientific studies. It develops selected indicators that describe the condition of the world's forests, where condition is defined as the current and future capacity of forests to provide the full range of goods and services that humans need and consume. It shows that forest areas in developed countries continue to increase slightly, while clearance for agriculture, development, and logging in developing countries is reducing their forests by at least 140,000 square kilometers every year. Pilot Analysis of Global Ecosystems.

WRI, USA, 2000, 100 pages. Price:GBP 16.95 paperback

The pilot analysis of global ecosystems: freshwater systems

Carmen Revenga, Jake Brunner, Norbert Henninger, Richard Payne and Ken Kassem

Analyzes quantitative and qualitative information and develops selected in-

dicators of the condition of the world's freshwater systems, revealing that the world's freshwater systems are so degraded that their ability to support human, plant and animal life is greatly in peril. Pilot Analysis of Global Ecosystems. *WRI*, USA, 2000, 100 pages. Price:GBP 20.95 paperback

The pilot analysis of global ecosystems: grassland ecosystems

Robin White, Siobhan Murray and Mark Rohweder
Examines grassland ecosystems of the world using a large collection of spatial and temporal data, analyzing datasets primarily at the global level. It presents quantitative indicators and qualitative information on the condition of the world's grasslands, looking at the current and future capacity of these ecosystems to provide goods and services important to humans. The report warns that the world's grasslands have declined in their extent and condition, as well as their ability to support human, plant, and animal life. Pilot Analysis of Global Ecosystems. *WRI*, USA, 2000, 100 pages. Price:GBP 20.95 paperback

The marine monitoring handbook

Ed. by Davies et al
Presents the very latest information on the effective monitoring of Marine Special Conservation Areas (SACs), including guidance on appropriate techniques. It is an informative insight into how the UK nature conservation agencies will be monitoring marine SACs in the future and is equally useful for others working in the field of marine environmental monitoring. *JNCC*, 2001, c. 400 pages. Price:GBP 15

The rhizosphere. Biochemistry and organic substances at the soil-plant interface

Ed. by Roberto Pinton, Zeno Varanini and Paolo Nannipieri
Marcel Dekker, USA, 2001, 424 pages, figs, tabs. Price:GBP 165 hardback

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