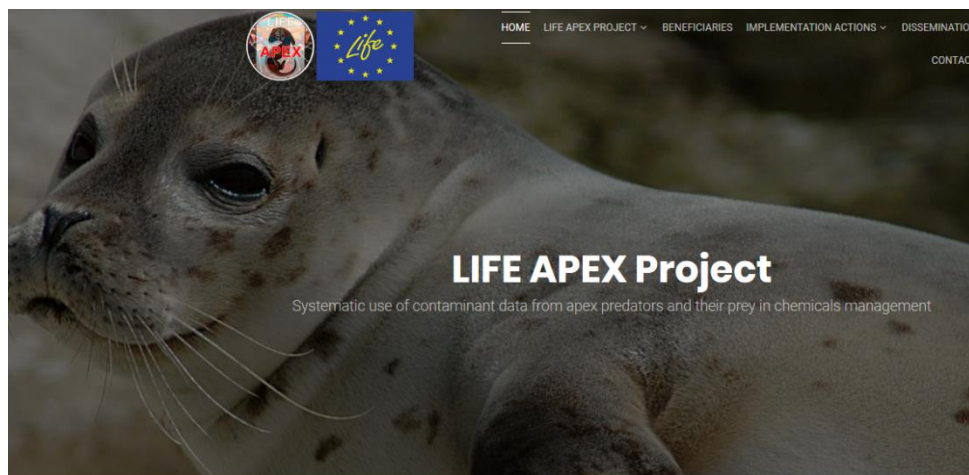


# NEWSLETTER LIFE APEX



ISSUE NO. 2 | MAY 2019

## PROGRESS REPORT OF LIFE APEX



Upcoming Events  
[International Conference on Environmental Specimen Banks \(ESB\)](#)  
3-5 June 2019, Stockholm, Sweden

Recent Events  
[LIFE APEX Workshop and Winter School](#)  
21-23 January 2019, Bratislava, Slovak Republic

Search ...



[www.lifeapex.eu](http://www.lifeapex.eu)

### Telegram

- LIFE APEX organises the development and maintenance of various web-based databases for the collection & evaluation of data/information on emerging substances in top predators and their prey:
  - **Sample Catalogue**
  - **Chemical Occurrence Data Base**
  - **Suspect List Exchange**
  - **Digital Sample Freezing Platform**
- Draft guidance has been established for shipping samples, which are subject to EU regulations on CITES and biologically hazardous materials
- 65 samples have been received by the University of Athens, where they have been lyophilized and distributed to the LIFE APEX laboratories
- First results will be presented at SETAC EU in Helsinki, the International Conference on Environmental Specimen Banks in Stockholm and at the LIFE APEX Regulatory Advisory Board meeting in Berlin.

### TOPIC 01

LIFE APEX Webpage and Databases

Issued Questionnaires

### TOPIC 02

Samples received for chemical analysis in B4 Tier 1

### TOPIC 03

Meeting of the Project Steering Committee and the Regulatory Advisory Board in Berlin, June 2019

LIFE APEX project meeting, October 2019

# 01: LIFE APEX WEBPAGE

The [LIFE APEX website](#) is online and provides:

- project information
- information on upcoming events
- dissemination documents
- information about apex predators **(A)**
- LIFE APEX databases **(B)**
- an overview of planned and accomplished actions **(C)**

## DISCOVER APEX PREDATORS



**A**

## CURRENT STATUS

### B1's PROJECT DELIVERABLE PRODUCTS

NAME	DEADLINE	STATUS
1 Updated R&T Plan	08/2020	
2 R&T Plan	02/2019	DONE
3 List of potential R&T Partners and areas of interest	09/2018	DONE
4 Updated R&T Plan	08/2021	
5 R&T Partner resources & capacities questionnaire responses	08/2019	
6 Updated R&T Plan	08/2019	

### B1's PROJECT MILESTONES

NAME	DEADLINE	STATUS
1 R&T Workshop convened	12/2018	DONE
2 R&T Partners contacted	10/2018	DONE
3 Resources and capacities questionnaire issued	02/2019	DONE

**B**

**C**

# 01: LIFE APEX DATABASES

## Suspect list exchange:

- Uses substance lists of the NORMAN network. For example, ECHA has provided a list of 40,000 registered substances, which will be used in LIFE APEX

## LIFE APEX chemical occurrence data:

- Collects analytical results for biota samples from various monitoring programs

## LIFE APEX sample catalogue (see below):

- Lists samples of environmental specimen banks, research collections and natural history museums that are available for biomonitoring

## Digital Sample Freezing Platform:

- Collects chromatograms of the LIFE APEX samples

Export to CSV

Show 200 entries

ID	Title	Country of origin	Species Common name	Species Latin name	Habitat type	Sample type	Start date	End date	Lineage	Physical state	Number of samples	Archive location - village/town/city	Archive location - country
2	Veterinary examination and tissue archive for birds of prey found dead within Germany	Germany	White tailed eagle	Haliaeetus albicilla	Other (not on list)	Various	1992	ongoing	Passive and targeted collection	Frozen (-20oC)	<10,000	Berlin	Germany
5	German Environmental Specimen Bank	Germany	Eelpout (filet)	Zoarces viviparus	Marine	Filet	1993	ongoing	Targeted collection	Frozen (Liquid nitrogen gas phase, < -150°C)	<100,000		
1	Veterinary examination and tissue archive for birds of prey found dead within Germany	Germany	Common buzzard	Buteo buteo	Terrestrial	Various	1999	ongoing	Passive and targeted collection	Frozen (-20oC)	<1,000	Berlin	Germany
3	Naturalis Biomonitoring Collection	Netherlands	Common buzzard	Buteo buteo	Terrestrial	Tissue - liver	2018	ongoing	Passive collection	Frozen (-20oC)	<1,000	Leiden	The Netherlands
4	Predatory Bird Monitoring Scheme (PBMS)	United Kingdom (UK)	Barn owl	Tyto alba	Terrestrial	Tissue - liver	1960	ongoing	Passive collection	Frozen (-20oC)	<100,000	Lancaster	United Kingdom (UK)

# 01:QUESTIONNAIRES

## Questionnaire on existing quality assurance for sample, processing and archiving of biota samples

- Issued by Fraunhofer IME to environmental specimen banks, research collections and natural history museums
- Answers are currently evaluated

## Questionnaire on the use of chemical monitoring data in support of chemicals regulation

- Issued by UBA to institutions involved in chemicals regulations



The aim of the LIFE APEX project is to improve the systematic use of chemical monitoring data from apex predators and prey (AP&P) for protecting human health and the environment. To gain acceptance by authorities, monitoring data need to be full documented and of high quality. This survey intends to gather information on the quality assurance measures applied for the sampling, processing and archiving of animal samples by Europe's Environmental Specimen Banks, Natural History Museums and other research collections. We would appreciate if you could answer the following questions and provide the applied protocols for the purpose of reviewing in this survey (e.g. by citing published information or giving links to internet resources).

### Questionnaire on the use of chemical monitoring data in support of chemicals regulations

Bitte füllen Sie dieses Fragebogen für die LIFE APEX (Environmental Specimen Banks) aus. Die Ergebnisse der chemischen Überwachung sind für die Regulierung von Chemikalien im Rahmen der REACH-Richtlinie von Bedeutung. Bitte geben Sie Informationen über die Qualitätssicherungsmaßnahmen für die Probenahme, die Aufbereitung und die Archivierung von Tierschleimproben an. Wir würden uns freuen, wenn Sie die folgenden Fragen beantworten und die angewandten Protokolle für die Überprüfung in dieser Umfrage (z.B. durch Zitiere von veröffentlichten Informationen oder Links zu Internetressourcen) bereitstellen könnten.

Image title



# 02: SAMPLE ANALYSIS TIER 1 (+++ONGOING+++)

<p><b>United Kingdom</b></p> <p><b>Predator (liver)</b></p> <ul style="list-style-type: none"> <li>• Harbour porpoise (5/5)</li> <li>• Common buzzard (5/5)</li> <li>• Eurasian otter (5/5)</li> </ul> <p><b>Prey (filet):</b></p> <ul style="list-style-type: none"> <li>• Roach (5/5)</li> <li>• Eelpout/marine fish (0/5)</li> </ul>	<p><b>Germany</b></p> <p><b>Predator (liver)</b></p> <ul style="list-style-type: none"> <li>• Harbour seal (4/5)</li> <li>• Common buzzard (5/5)</li> <li>• Eurasian otter (5/5)</li> </ul> <p><b>Prey (filet):</b></p> <ul style="list-style-type: none"> <li>• Bream (5/5)</li> <li>• Eelpout (3/5)</li> </ul>
<p><b>The Netherlands</b></p> <p><b>Predator (liver)</b></p> <ul style="list-style-type: none"> <li>• Harbour seal (2/5)</li> <li>• Common buzzard (2/5)</li> <li>• Eurasian otter (5/5)</li> </ul> <p><b>Prey (filet):</b></p> <ul style="list-style-type: none"> <li>• Bream (1/5)</li> <li>• Eelpout/marine fish (0/5)</li> </ul>	<p><b>Nordic region (Sweden)</b></p> <p><b>Predator (liver)</b></p> <ul style="list-style-type: none"> <li>• Harbour seal (4), Grey seal (1)</li> <li>• Common Buzzard (0/5)</li> <li>• Eurasian otter (5/5)</li> </ul> <p><b>Prey (filet):</b></p> <ul style="list-style-type: none"> <li>• Bream/roach/perch (0/5)</li> <li>• Herring (3/5)</li> </ul>



➔ 65 Samples have been lyophilised and distributed

## 02: WORKING STEPS FOR EACH SAMPLE

**Lyophilisation and sample distribution among labs:**

**Wide-scope target screening (> 2500 chemicals), suspect and non-target screening** by LC-QTOFMS and GC-APCI-QTOFMS



University of Athens  
(NKUA)

**Target analysis**

(legacy POPs e.g.:  
PCBs, BDEs, HCB)



University of Firenze  
(UNIFI)

**Wide-scope Suspect Screening** by DSFP

**Non-target screening** by GC-MS (EI/PCI/NCI modes)

**Target analysis** of dioxins and dioxin-like compounds, chlorinated alkanes, novel organophosphorous flame retardants and Declorane Plus



Environmental  
Institute (EI)

**Target analysis (Hg)**



Fraunhofer IME  
(Fh-IME)

## 03: REGULATORY ADVISORY BOARD MEETING, JUNE 2019

Meeting of the Project Steering Committee and the Regulatory Advisory board (RAB)

**When?**

11th of June 2019 from 10-14h (CET)

**Where?**

German Environment Agency, Berlin.

**Purpose of the Meeting:**

- Updating RAB on the progress of LIFE APEX
- **+++Presentation and discussion of first results+++**
- How can LIFE APEX include scientific and regulatory advice from RAB?
- How can LIFE APEX and RAB promote the use of chemical data of wildlife biota in research and regulation?

## 03: PROJECT MEETING, OCTOBER 2019

LIFE APEX project meeting

**When?**

01.10.-04.10.2019

**Where?**

Florence, Italy

**Purpose of the Meeting:**








- **Presentation and discussion of analytical results**
- Discussion of progress within LIFE APEX and upcoming tasks within the project
- Planning B4 Tier3 analysis

## 03: MEMBERS OF THE REGULATORY ADVISORY BOARD

Name	Institution	Responsibility
<b>Henna Piha</b>	<b>ECHA</b> Classification and Prioritisation Unit European Chemicals Agency	Scientific officer
<b>Stephanie Bopp</b>	<b>European Commission</b> Directorate General Joint Research Centre Directorate F – Health, Consumers and Reference Materials F.3 - Chemical Safety and Alternative Methods Unit	Scientific officer
<b>Sylvain Bintein</b>	<b>European Commission</b> Environment DG Unit B2: Sustainable Chemicals	REACH and CLP Team leader
<b>Morten Jartun</b>	<b>NIVA</b> Norwegian Institute for Water Research (NIVA)	Project manager of the Norwegian ESB
<b>Björn Hidding</b>	<b>BASF</b> BASF SE , RB/TC - Z57	Scientific officer PBT EG representative for CEFIC
<b>Dirk Bunke</b>	<b>Öko-Institut e.V.</b> Institut für angewandte Ökologie	NGO representative in PBT EG
<b>Stylios Kephelopoulos</b>	<b>European Commission</b> Directorate General Joint Research Centre Directorate F - Health, Consumers and Reference Materials. F.7 - Knowledge for Health and Consumer Safety Unit	Co-ordinator of the IPCHEM project
<b>Joop de Knecht</b>	<b>National Institute for Public Health and Environment (RIVM)</b> Centre for Safety of Substances and Products (VSP)	Senior policy advisor/MSC member
<b>José Tarazona</b>	<b>EFSA</b> Pesticide Unit European Food Safety Authority	Head of Pesticide Unit

# Organisation of Life Apex

## Project Partners

 <p>Environmental Institute</p>	 <p>German Environment Agency</p>	 <p>Naturalis Biodiversity Center</p>	 <p>National and Kapodistrian University of Athens</p>
 <p>Fraunhofer Institute for Molecular Biology and Applied Ecology IME</p>	 <p>Natural Environment Research Council</p>		 <p>Università degli Studi di Firenze</p>

## IMPRINT

<p><b>Project Coordinator</b></p>  <p>Jaroslav Slobodnik is the director of Environmental Institute. Among his specialisations are environmental science-to-policy interactions, development of monitoring strategies and environmental analytical chemistry. He is frequently responsible for the design of environmental information and data management systems</p> <p><b>E-Mail:</b> slobodnik@ei.sk</p>	<p><b>Project Manager</b></p>  <p>Natalia Glowacka is the project manager of LIFE APEX. She got her PhD degree in environmental management. She has more than five years experience in the field of administration and management of national and international environmental projects in Environmental Institute.</p> <p><b>E-Mail:</b> glowacka@ei.sk</p>	<p><b>Newsletter Editor</b></p>  <p>Alexander Badry is an early career researcher in the field of environmental toxicology. He is working as research assistant at the German Environment Agency and is doing his Doctorate at the Leibniz Institute for Zoo and Wildlife Research on contaminants in birds of prey.</p> <p><b>E-Mail:</b> alexander.badry@uba.de</p>
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